





Public call for applications for the competitive selection procedure for admission to the 39th Cycle Ph.D. Research Course with administrative seat at the *Università del Salento* (University of Salento)

<u>Please note: The English version of the Call has been prepared exclusively to facilitate the access of foreign candidates</u>

Applications for the competitive selection procedure must be made within and **not after 13:00 (Italian time) on 17th July 2023**.

There is no contribution to participate in the competition.

#### academic year 2023/2024

### (the official Call is approved by Rector's decree n. 594/2023)

- "Diritti e Sostenibilità" / Law and Sustainability (see attachment A);
- "Filosofia: Forme e Storia dei Saperi Filosofici" / Philosophy: Forms and History of Philosophical Knowledge / Philosophie: Formes et histoire des savoirs philosophiques / Philosophie: Formen und Geschichte des philosophischen Wissens" (see attachment B);
- "Fisica e Nanoscienze" / Physics and Nanosciences (see attachment C);
- "Human and Social Sciences" / Human and Social Sciences (see attachment D);
- "Ingegneria dei Materiali e delle Strutture e Nanotecnologie" / Material, Structure and Nanotechnology engineering (see attachment E);
- "Ingegneria dei Sistemi complessi" / Engineering of complex systems (see attachment F);
- "Lingue, Letterature, Culture e loro applicazioni" / Languages, Literatures and Cultures and their applications (see attachment G);
- "Matematica e Informatica" / Mathematics and IT (in agreement with Università della Basilicata) (see attachment H);
- "Nanotecnologie" / Nanotecnology (see attachment I);
- "Scienze del Patrimonio Culturale" / Sciences for Cultural Heritage (see attachment L);
- "Scienze e Tecnologie Biologiche ed Ambientali" / Biological and environmental sciences and technologies (see attachment M);
- "Transizione Digitale e Sostenibilità: le imprese e le Amministrazioni pubbliche nell'economia globalizzata" / Digital Transformation and Sustainability. Firms and public Administrations in the global Economy (see attachment N).







### **Article 1) Implementation**

The call for application for the selection procedure for admission to the three-year Doctoral (Ph.D.) Research Course, accredited by the Italian Ministry of Education, Universities and Research (MIUR) with the approval of Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR) with administrative seat at the University of Salento is now open.

The detailed description of each Course (the PhD course description) is attached to this call for applications (to A from N) and is to be considered a part of it. The curricula for the three-year Ph.D. research Courses to be included in the call for applications are the following:

- Diritti e Sostenibilità (Law and Sustainability, see attachment A);
- Filosofia: Forme e Storia dei saperi filosofici (Philosophy: Forms and History of Philosophical Knowledge, see attachment B);
- Fisica e Nanoscienze (Physics and Nanosciences, see attachment C);
- Human and Social Sciences (see attachment D);
- Ingegneria dei Materiali e delle Strutture e Nanotecnologie (Material, Structure and Nanotechnology engineering, see attachment E);
- Ingegneria dei Sistemi complessi (Engineering of complex systems, see attachment F);
- Lingue, Letterature, Culture e loro applicazioni ((Languages, Literatures and Cultures and their applications, see attachment G)
- Matematica e Informatica (Mathematics and IT, see attachment H);
- Nanotecnologie (Nanotecnology, see attachment I);
- Scienze del Patrimonio Culturale (Sciences for Cultural Heritage, see attachment L);
- Scienze e Tecnologie Biologiche ed Ambientali (Biological and environmental sciences and technologies, see attachment M);
- Digital Transformation and Sustainability. Firms and public Administrations in the global Economy" (see attachment N).

In accordance with the provisions of MIUR decree 226/2021, <u>only doctoral courses</u> will be activated that have obtained from the Ministry, in accordance with <u>ANVUR's opinion</u>, accreditation (or confirmation of accreditation) following the outcome of the procedures that are still in progress.

If one of the established courses does not obtain accreditation, it will be deactivated and therefore the admission exams will not be carried out.

The cards of the PhD courses contain an overall indication of the places and scholarships announced, including:

- sholarships financed with resources from the PNRR, Mission 4, Component 1, assigned by the MUR with the Ministerial Decree n. 118/2023, with which it is intended to support the promotion and strengthening of the training and post-graduate doctoral level specialization which are divided into:







- <u>Investment 3.4.</u> "Didactics and advanced university skills" which aims to qualify university and doctoral courses through strategic objectives: <u>digitization</u>, <u>culture of innovation and internationalization</u>;
- **Investment 4.1.** "Extension of the number of research doctorates and innovative doctorates for public administration and cultural heritage" which aims to increase the reserve of human capital engaged in research-oriented activities, in **public administrations** and in **cultural heritage**.
- sholarships financed with resources under the PNRR, Mission 4, Component 2 "From research to business", Investment 3.3., assigned by the MUR with the Ministerial Decree n. 117/2023 and co-financed by companies, with which it is intended to enhance high-profile skills, especially in the areas of Key Enabling Technologies, through the establishment of dedicated doctoral programs, with the contribution and involvement of companies.

Scholarships related to DD.MM. 117 and 118 require the winner Applicants, under penalty of revocation of the same, to carry out the innovative doctoral paths provided for by the aforementioned Ministerial Decree, including the mandatory periods, where provided for by the related Investment, to be carried out abroad as well as in companies, research centers or Public administrations.

The winner Applicants of these specific thematic scholarships are therefore required to comply with all the conditions required by the MUR in the aforementioned DD.MM. 117 and 118 and in the Unilateral Act of obligation that will be signed by the University of Salento and for grants financed under the Ministerial Decree n. 117/2023 (co-financed by companies) require compliance with the rules established in the agreements stipulated with companies.

The University of Salento will proceed with the revocation of the scholarships, even possibly in porgress in the event that, for whatever reason, the ministerial funding granted should cease.

#### **Article 2) Admission Requirements**

Admission to the competitive selection procedure to one (or more) of the Ph.D. research Courses listed in article 1 is open to all the citizens, without age or citizenship limitations, who enjoy civil and political rights in their state of residence or origin and who, within the expiry date of this public call for applications, as specified in the following paragraph, hold a degree awarded in accordance with Italian Law n. 341/90, a specialist degree obtained in accordance with DM (ministerial decree) n. 509/99 or a master's degree awarded in accordance with DM (ministerial decree) no. 270/04, or a similar and suitable academic qualification obtained abroad.

The detailed notes for each Ph.D. research course (Ph.D. research course descriptions), in attachment to this call for applications (Attachments A-N) contain specific information relative to each course and indication of the specific types of <u>degree required for admission to the competitive selection procedure.</u>

Provided that they make an application by the deadline specified in article 3 below, eligible Applicants also include, those who will be awarded one of the







# aforementioned degrees by the deadline of enrollment in the PhD course, pursuant to the provisions of art. 8, paragraph 1, of the D.M. n. 226/2021.

Once they have got their degrees, Applicants must immediately submit by email all the required information (name of institution which awarded the degree, date of issue, type of degree, final mark) either by means of self-certification or by means of a substitute declaration as specified by DPR (presidential decree) no. 445/00 (in the case of EU Applicants) or a certificate (for Applicants from outside the EU) accompanied by a copy of a valid identity document to the following address protocollo@unisalento.it and in cc master.dottorati@unisalento.it

Applicants who expect to get their degree by the mentioned date will be admitted conditionally to the competitive selection procedure.

Applicants, even if winners of the selection, will forfeit the possibility of enrolling in the Course if they do not achieve the qualification required for access without delay within and no later than the deadline for enrollment in the course.

Detailed information on the individual Ph.D. research courses (Ph.D. research course descriptions) included in the appendix to this public call for applications (attachments A-N).

– specifies the positions on the courses Applicants may compete for, the grants and scholarships available, and, where foreseen, any positions reserved for specific research themes, financed with grants / scholarships funded under certain Courses / projects or under agreements with external bodies which foresee mandatory research on a precise theme which has already been specified in the attached Ph.D. research course descriptions.

Positions on Courses with grants/scholarships subject to a specific research theme, for the purposes of this call for applications, are those positions, specified in the Ph.D. research course descriptions, which, by their particular nature, cannot be assigned purely and simply on the basis of assessment of the Applicant in the general competitive selection procedure but require further specific assessment beyond that of the general assessment.

An Applicant who wishes to apply to more than one course must submit different online applications to participate in each separate competitive selection procedure.

In addition to applying for general positions on Courses, Applicants can participate in the competitive selection procedure for positions on Courses with grants/scholarships subject to maximum 2 specific research themes from among those published for each Ph.D. research course.

This choice must be clearly indicated in the online application by specifying the type of grant /scholarship for the specific chosen research area.

The Applicant who presents an application for a position with a grant/scholarship subject to a specific research theme (i.e. for a position with an apprenticeship contract), expresses his / her preference for the assignment of the specific position (positions) with grant/scholarship (grants/scholarships).







The choice made by the Applicant is binding and irrevocable and entails the obligation on the part of the same Applicant, in the event that he / she is the Winning Applicant, to accept the position with a scholarship subject to a specific research theme.

In the event that the candidate is the winner of two specific research - themed scholarships at the same time, they must proceed, no later than 5 days from the date of publication of the decree in the online register, to exercise their choice for one of the two positions.

Applicants who do not apply for positions on a Course with a grant/scholarship subject to a specific research theme take part exclusively in the competitive selection procedure for general research positions (with or without a grant/scholarship).

Candidates wishing to participate in the competition for the assignment of places with a restricted topic scholarship must submit a research project in line with one of the selected thematic scholarships and will then be required to carry out the thematic research in case of assignment of the scholarship and to comply with the provisions of the agreements signed with the external financing bodies, accepting the provisions and obligations possibly provided for in the same agreements.

Aptitude or experience regarding the research theme chosen must be declared when submitting the application for participation in the competitive selection procedure and will be evaluated by the Admissions Board during the interview.

#### Art. 3 – Application Procedure

Applications for the competitive selection procedure must be made <u>within and</u> <u>not after 13:00 (Italian time) on 17 July 2023</u>.

The application shall be made, under penalty of exclusion, exclusively online, by following the appropriate procedure made available at: https://studenti.unisalento.it

To access the procedure, you must:

- a) Log on to the said website https://studenti.unisalento.it and **select**, **in the top right corner**, **in the MENU tab**, **your chosen language (Italian or English)**
- b) If the Applicant has not already registered, complete the registration process, clicking on "REGISTRAZIONE" in the "AREA RISERVATA", or access using your credentials;
- c) The applicant who has already registered on Esse3 can directly access the above mentioned website (accessing from "Authentication procedure LOGIN") and log in with the credentials he/she already have. On the other hand, foreign applicants will be able to access the website https://studenti.unisalento.it through "Registration for foreign candidates"/"Registrazione per candidati stranieri" without having to activate the SPID. All other applicants must activate SPID level 2. The







- information needed to activate SPID can be found at https://www.spid.gov.it/richiedi-spid;
- d) Go to the portal (authentication LOGIN) on the banner "Accedi al Portale degli studenti" and click on "REGISTRAR'S OFFICE/ADMISSION TEST/ISCRIZIONE CONCORSI/DOTTORATO DI RICERCA". Choose the Doctorate Course on which you intend to apply and, after carefully reading this call for application and its attachments, complete the on-line application form, entering all the required data. The procedure described in this paragraph **is obligatory in order to** be admitted to the competitive selection procedure.
- e) Complete the online application form and attach all required documents in pdf, jpeg or tiff formats.

The online procedure for the submission of the application for participation in the competitive selection procedure <u>will be available at https://studenti.unisalento.it starting from 13:00 (italian time) on 22 June 2023.</u>

There is no contribution to participate in the competition.

#### ITALIAN TAX CODE (CODICE FISCALE) FOR FOREIGN APPLICANTS

N.B. For first time users, the system will require mandatory indication of their Italian tax code (codice fiscale).

International students who do not have an Italian tax code will be directed to the following link: <a href="www.codicefiscale.com">www.codicefiscale.com</a> where he or she can obtain one, simply by inserting the name of the country or state in which he or she was born (e.g. someone who was born in Paris should simply put "France").

#### **APPLICATION PROCESS**

Applicants are kindly requested to rigorously follow in detail all the following instructions:

# The files required by the electronic procedure must be attached in pdf, jpg or tiff formats.

These files must be inserted in the relevant section of the online procedure and must be named in the following manner:

- identity card: CI Applicant's name (eg. CI JACKSON)
- curriculum vitae: CV\_Applicant's surname (e.g. CV\_JACKSON)
- self-certification of exams: ESAMI\_Applicant's surname (e.g. ESAMI\_JACKSON)
- other qualifications: TITOLO\_1\_Applicant's surname; TITOLO\_2\_Applicant's surname; TITOLO\_3\_Applicant's surname; etc;
- research project: **PROGETTO PHD in Applicant's surname**;
- account MICROSOFT TEAMS for REMOTE interview for those Courses that take place entirely remotely or for candidates who have the requisites







for the Courses for which the interview is foreseen): account\_TEAMS\_ Applicant's surname;

- co-tutor (only for the Ph.D. research course in "Filosofia: Forme e Storia dei saperi filosofici" for which one is expressly required): cotutor\_Applicant's surname (e.g. COTUTOR\_JACKSON);
- curriculum and lines of research (only for the Ph.D. research course in "Human and Social Sciences")
- letter of presentation (for the doctoral course in "Physics and Nanosciences": letter presentation Applicant's surname;

It is reccomended not to exceed the overall 25 characters in the file name to avoid problems when downloading them from the Esse3 platform.

In the section related to the insertion of TITLES under "TYPOLOGY", the system asks to choose from a drop-down menu among various items (e.g. C.V., CARTA DI IDENTITA'/IDENTITY CARD, Progetto di ricerca/Research Project, Autocert. Esami/Self-certification of exams, Altri titoli/Other qualifications, interview remotely by TEAMS etc.).

For each <u>TYPOLOGY OF TITLE</u> entered, the applicant must fill in the <u>TITLE</u> section.

The applicant must include the following information in that section:

- for the TITLE related to the "CARTA DI IDENTITA'/IDENTITY CARD" it will be necessary to insert "CI surname applicant" (eg. CI JACKSON);
- for the TITLE related to the C.V. it will be necessary to insert "CV surname applicant" (e.g. ESAMI\_JACKSON);
- for the TITLE related to the "Progetto di ricerca/Research Project" it will be necessary to insert "**Research Project surname applicant**" (e.g. Research Project\_JACKSON);
- for the TITLE related to the "Autocertificazione Esami/Self Certification Exams" it will be necessary to insert "**Exams surname applicant**";
- for the TITLE related to the "Autocertificazione Esami/Self Certification Exams" it will be necessary to insert "title 1 surname applicant", "title 2 surname applicant", etc.
- for the TITLE related to the co-tutor (for the courses that provide it) it will be necessary to insert "co-tutor surname applicant".

Compliance with the above instructions will allow the Admissions Board to review the uploaded documents swiftly. It will also reduce the risk of dispersion of IT documents with objects that are too long during the transfer of data from the online platform.

The University of Salento declines any responsibility in those cases in which the Applicant proceeds to the transmission of the documents without following the instructions above in the naming of the attached files.

COMPLETING THE ONLINE REGISTRATION PROCEDURE







The online registration procedure terminates with the printing out from the student portal of the receipt of the application for admission to the completive selection procedure.

Once the Applicant has printed out the "admission test application", upon completion of the online procedure, he or she can consider that his or her application to participate in the competitive selection procedure has been correctly completed.

With the online submission of the application the Applicant:

- assumes personal responsibility, pursuant to article 46 and 47 of DPR (presidential decree) 445/2000, regarding the declarations he or she has made and the files attached to the online application, in full awareness of the criminal penalties deriving from false statements and / or false declarations;
- examines the methods of processing of his or her personal data.

N.B. Applicants are invited to submit their application to participate in the competitive selection procedure well in advance of the date (and time) of the deadline for submission of the application to avoid problems of various kinds that could jeopardize the successful outcome of the application transmission procedure.

Indeed, near the expiry time, because of overload due to the high number of users who are completing the online procedure, the system may be subject to slowing down.

It is possible to apply for more than one Ph.D. research course; in which case, the Applicant will have to complete more than one online application for each competitive selection procedure for which he / she intends to participate.

Each candidate may submit **only one research project** for each PhD course for which he / she is applying.

If the Applicant foresees that they will obtain a qualification **by the deadline for registering for the course**, he / she must expressly indicate this fact in the application by filling in the section regarding qualifications for admission with the insertion of the "titolo in ipotesi" ("hypothetical qualification"). In such a case, the Applicant will be admitted to the competitive selection procedure "con riserva" (conditionally).

In order to be constantly updated on news regarding this call for applications, the Applicant can subscribe to the RSS feed associated with the web page of the competitive selection procedure, by clicking on the icon labelled "Sottoscrivi Rss" ("Subscribe to RSS feed") on the page of the call for applications on the University of Salento website and adding it to his or her own RSS reader.

#### Article 4) Documents to be submitted

Together with the application for participation in the competitive selection procedure, completed online, the Applicant should attach the files containing:

1. a valid identity document;







- 2. a curriculum vitae containing, among other things, reference to a telephone number and an email address that may be used for all subsequent official communications related to the competitive selection procedure;
- 3. information relating to the Applicant's completed studies (self-certification or photocopy of a transcript of records indicating the exams taken and the marks obtained on the occasion of the attainment of a three-year, specialist, or Master's degree or a degree of the Vecchio Ordinamento -- an Italian degree of the format before the Bologna Process reforms), with the indication of the **relative average** of marks and of the total duration of the Ph.D. research course in question; students who have not yet completed their degree will be assessed on the basis of the average marks obtained in the exams up to the moment of submission of the application for participation in the competitive selection process;
- 4. documentation certifying that the Applicant meets the qualifications / experience / activities indicated by the individual Ph.D. research course descriptions attached to this call for applications, which the Applicant possesses and desires to be evaluated by the Admissions Board;
- 5. your research project (which must be presented together with the application for participation in the competitive selection procedure). These candidates will be evaluated, as far as the first test is concerned, on the research project presented and therefore will not take the written test. Each candidate may submit only one research project for each PhD course for which he / she is applying;
- 6. the indication of the e-mail address that the Selection Board of the competition will use for the creation of the group on the MICROSOFT TEAMS platform for the invitation to candidates for the interview.

With the application to participate in the competition, each candidate automatically **participates in the general positions announced** without the need to make this choice in the telematic platform and can request to participate, in addition, up to two specific research thematic places among those that may be announced for each PhD course.

The online application is to be considered, for all legal purposes, as an act of self certification of personal data, of the declared qualifications and the statements made as well as of the attached research project (where one is required) and therefore, with the presentation of the online application, the Applicant assumes personal responsibility, pursuant to articles 46 and 47 of DPR (presidential decree) 445/2000, regarding the declarations he or she has made and the files attached to the online application, in full awareness of the criminal penalties deriving from false statements and / or false declarations.

#### Article 5) Supplementation/correction of the application

The application form may be corrected /supplemented exclusively by electronic means within the deadline for submitting the electronic application indicated in the previous art. 3.







In order to modify/supplement the application, the applicant must access again the website studenti.unisalento.it and click on "MENU" by selecting "ADMISSION TEST/CONCORSI". So he/she may select the competition for which he/she wants to modify the application from "LISTA CONCORSI A CUI SI E' ISCRITTI". Then it must click on "PROCEED WITH ADMISSION" and finally on "COMPLETA IL PROCESSO SELEZIONATO" at the bottom of the page.

Thus the applicant may access again the submitted application and proceed to replace, delete or add further documents. At the end of the modifications, the applicant will have to transmit the new application form that will automatically replace the previous one already sent. The new application generated by the system will permanently cancel the previous one; so it is recommended to check the correctness and completeness of the documents attached to the last application submitted.

# Article 6) Applicants with a qualification awarded by a university outside Italy

Applicants who are in possession of a degree awarded by a university outside Italy which has not yet been declared as equivalent to an Italian degree on the basis of international agreements, must accompany the application form with the following documents:

- Certification of the foreign qualification, together with a translation into Italian or English to be included in the "altri titoli" (other qualifications) of the online application; it must include explicit indication of the university exams taken and grades obtained.

The Admissions Board appointed for admission to the Ph.D. research course will, on the basis of the documentation attached by the Applicant, ascertain the eligibility of the foreign qualification for admission to the Course, "in accordance with current legislation in Italy and in the country where it was awarded and with international treaties or agreements concerning the recognition of qualifications for further education."

In case of admission to the Ph.D., successful Applicants in possession of such qualifications awarded outside Italy must submit, within ninety (90) days from the date of registration, the following documentation:

- certificates and diplomas translated and legalized by the competent Italian diplomatic or

consular representation abroad;

- declaration of value of the foreign qualification issued by the competent Italian diplomatic or consular representatives abroad.

#### **Article 7) Responsibility**

The University of Salento does not accept any liability in the event of loss of communications due to:







- -incorrect information about the residence or the address of the Applicant;
- an Applicant's failure or delay in notifying it of a change of address;
- or technical problems attributable to the email address indicated by the Applicant.

Disabled Applicants, recognized under Italian Law no. 104 of 5 February 1992, must explicitly request in their application form the required support, in relation to their disability, as well as give notification of the possible need for additional time for the completion of the admissions tests.

#### **Article 8) Exclusion**

The following applications will be automatically excluded:

- a) applications made and / or received in a manner or timing not in accordance with that specified in article 3 above of this call for applications;
- b) applications from Applicants who do not possess the specific qualifications indicated in the Ph.D. research course descriptions in the appendix to the call for applications or who do not obtain them within the deadline set by the previous art. 2;
- c) applications without a research project, which must be attached when submitting the application form within the deadline specified in article 3 of this call for applications;
- d) to be attached electronically already at the time of submitting the application for participation in the terms referred to in the previous Article 3, for all PhD courses:
- e) applications that lack a copy of a valid identity document, which must be uploaded when submitting the online application form.

Any supplementations or corrections to the application not made according to the provisions of Article 5 of this call for applications or made after the deadline has passed, will not be considered valid.

Failure to provide a curriculum vitae or failure to indicate the university exams taken (with relative average marks) or other qualifications assessed by the Admissions Board, indicated in the relevant Ph.D. research course descriptions, will prevent the Admissions Board from being able to assign any mark under the heading "TITOLI" (qualifications).

In the case of those Applicants who, on the date of application for admission to the competitive selection procedure, are not yet in possession of the degree required to take part in the competitive selection procedure, the Admissions Board may decide to evaluate this qualification, as an alternative to the final degree mark, on the basis of the average mark of the exams sustained in the second level degree course, on the basis of a correspondence criterion that shall be established beforehand.

Likewise, the Admissions Board must establish correspondence criterion in advance with regard to the evaluation of the degree mark obtained abroad by an Applicant.







### Article 9) Procedure for competitive selection of Applicants

The competitive selection of Applicants will be carried out according to the timetable published on the University of Salento website for each of the competitive selection procedures (see attachments A-N), at the following link "Bandi e Concorsi/Concorsi/Ricerca/Bandi per Dottorati di Ricerca".

If impediments of any kind do not permit the respect of the examination schedule as indicated in the previous paragraph, the University of Salento will publish a notice with all the necessary changes, within three days prior to the date set for the test.

This notice will be published exclusively on the website of the University of Salento at www.unisalento.it in the "News" section and the dedicated section "Dottorati di Ricerca", accessibile from the page <a href="https://www.unisalento.it/didattica/dottorati">https://www.unisalento.it/didattica/dottorati</a>

Both will be considered as official notification to Applicants.

# A) DOCTORAL COURSES FOR WHICH THE INTERVIEW FACE TO FACE IS PROVIDED

As reported in the PhD Programs attached to this call for applications, the interview will take place face to face for the following PhD courses:

- Human and Social Sciences;
- Mathematics and Computer Science:
- Cultural Heritage Sciences;

For the hypothesis of an interview foreseen in presence, art. 14, paragraph 8, of the Unisalento Doctoral Course Regulations, as supplemented by resolution of the Board of Governors no. 94, dated 30.05.2023, establishes that:

"Candidates residing or domiciled abroad (or who, in any case, can prove, giving adequate reasons, that they are engaged abroad on the date scheduled for the interview) or who prove, by attaching appropriate medical documentation, that they are unable to reach the location fixed for the interview due to physical problems, may be admitted, upon request, to take the interview remotely. The request to take the interview remotely must be made by the candidate within the deadline specified in the application notice".

The request to take the interview remotely for PhD courses for which the "face-to-face" interview procedure is envisaged must be made by the candidate <u>no</u> <u>later than four days prior to the date of the interview</u>, by forwarding the 'attached form (Ann. 4) to the PEC address <u>protocollo@unisalento.it</u> and, for information, to the person in charge of the procedure indicated in the Course form attached to the announcement.







# B) <u>DOCTORAL COURSES FOR WHICH THE INTERVIEW</u> REMOTELY IS PROVIDED

The interview will take place exclusively online for the following PhD courses:

- Law and Sustainability;
- Philosophy: Forms and History of Philosophical Knowledge;
- Physics and Nanosciences;
- Material, Structure and Nanotechnology engineering;
- Engineering of complex systems;
- Languages, Literatures and Cultures and their applications;
- Nanotecnology;
- Digital Transformation and Sustainability. Firms and public Administrations in the global Economy.
- Biological and Environmental Sciences and Technologies.

For these Courses, candidates must already indicate a valid Microsoft Teams account in the application form (annex 2).

Candidates who must take the interview electronically (all, for the Courses listed in the hypothesis referred to in point B) or only those who are entitled and request it (in the hypothesis referred to in point A), are required, in the "hypothesis for admission to the interview:

- to install the software of the MICROSOFT TEAMS platform;
- to connect, on the day and at the time set by the Commission, to their account indicated in the application form in response to the invitation received from the Commission;
- to allow the Commission, before the start of the interview, to identify, by showing the same document already sent, in copy, as an attachment to the application and to use a webcam during the interview.

Failure to connect, the unavailability of the candidate on the day and at the established time or failure to show a valid identity document constitute grounds for exclusion from the selection procedure.

All candidates are admitted to the competition subject to ascertaining that they meet the admission requirements. The Administration may decide at any time, up to the approval of the ranking, the exclusion from the competition for lack of the prescribed requirements.

If the reasons for the exclusion pursuant to this article are ascertained after the completion of the competition, the Rector with his own decree orders the forfeiture of any right resulting from participation in the competition.

The University of Salento reserves the right to carry out sample checks in accordance with the provisions of art. 71 and following of the Presidential Decree n. 445 of December 28, 2000.

Assessment of applications will be carried out by a single Admissions Board for each Ph.D. research course that will be appointed by the Rector of the University of Salento and composed of between three and five members, proposed by the Ph.D. research course's Academic Board, from among professors and researchers in the relevant Ph.D. research course's subject area. No member may participate







in admission committees for the same PhD course for which he or she was a member in the previous cycle (38th cycle) nor will he or she be able to be subsequently part of final exam adjudicating boards that evaluate the thesis Ph.D. students for whom they were on the Admissions Board. By means of the decree appointing the Admissions Board, the Rector also appoints two professors proposed by the relevant Ph.D. research course's Academic Board as substitutes for the effective members in the event of one or more of them being incapacitated or absent.

The Ph.D. research course Academic Board can propose, in addition to the components indicated above, no more than two experts, including those from abroad, chosen from public and private research bodies and institutions.

In such a case, the experts enter the Admissions Board as full members.

In the event of incapacitation, withdrawal or absence of one or more effective members of the Admissions Board, at any stage of the competitive selection procedure, the coordinator shall make the necessary replacements, based on the names of the substitutes specified in the Rector's decree nominating the Admissions Board, taking into account, where possible, the scientific affinity between the member being replaced and his or her substitute.

The competitive selection procedure to the Ph.D. research course and the corresponding marks that may be awarded are indicated in the Ph.D. research course descriptions (attachments A to N of this call for applications).

The competitive selection procedure will aim to determine not only the knowledge acquired with reference to the research areas of the Ph.D. research course, but also to determine the scientific maturity, flexibility, aptitude, motivation and resourcefulness of the Applicant in the face of possibly new areas of research.

The competitive selection procedure will be carried out, pursuant to article 12 of the University Regulations on Ph.D. research courses (D.R. n. 433/2022) by:

- a) the assessment of qualifications (curriculum, university training course, professional experience and research);
- b) the assessment of a written test or a research project, depending on the provisions of the individual Ph.D. research course descriptions.
- c) an interview (viva voce) aimed at verifying the Applicant's knowledge and aptitude in research regarding the themes of the Ph.D, and research course in the specific themes indicated in the call in the event that the candidate has also opted for specific themes, where present (max 45 pp.), as specified in detail in the individual course sheets.

# Applicants are admitted to the interview only if they obtain a mark of at least 30/100 in the assessment of the research project.

The communication of the results of the assessment of the first stage (research project) will be as specified in the Ph.D. research course descriptions, attached to this call for applications, and which is an integral part of said (attachments A to N).







In the event that a Applicant has submitted an application for a position on a Ph.D. research course with a grant/scholarship subject to a specific research theme, as well as for a general position on a Ph.D. research course, the interview will be both on the general issues as well as on the specific theme and will therefore be carried out separately.

In the case of applicants who have submitted an application for a position on a Ph.D. research course with a grant/scholarship subject to a specific research theme, as well as for a general position on a Ph.D. research course, the Ph.D. research course Academic Board may award the research project (which must in all cases be the same) distinc and separate marks within the framework of the separate lists for which the candidate is applying.

The third test (interview) will be carried out separately, preferably at the same location and on the same date, for the general position on a Ph.D. research course and for a Ph.D. research course on a specific research theme indicated by the Applicant, according to the procedures described in the preceding paragraph and will give rise to distinct and separate marks.

The Applicant will pass the interview stage only if he or she achieves a mark of at **least 30/100**. Failing this, the he or she will not be admitted to the final rankings and consequently will not be in competition for the allocation of positions.

At the end of the various selection tests, the Admissions Board will draw up a separate list for each type of position (general research positions on the one hand, and positions subject to a specific research theme on the other) totalling for each type the marks awarded to each Applicant in the three different stages of the competitive selection procedure (i.e. research project, qualifications and interview).

Applicants who have opted to compete for positions on both general Ph.D. research Courses and on Ph.D. research course (one or two positions) with a grant/scholarship subject to a specific research theme and have completed all the stages of the competitive selection procedure successfully will be included, subject to the conditions referred to in the previous paragraph, in the two separate rankings with the relative marks. Applicants who have not obtained a grade of at least 60/100 in the ranking for the positions on a general Ph.D. research Course shall not be included in the rankings for the positions on Ph.D. research courses with a specific research theme.

In the event that the same Applicant is the Winning Applicant, at the same time, of a position on a Ph.D. research course with a general themes with a grant/scholarship and a position on a Ph.D. research course with a grant/scholarship subject to a specific research theme, then the University of Salento will proceed to give him/her the position on the Ph.D. research course with the specific research theme.

In the event that the winner is the winner of two places on a specific topic, he / she must proceed to opt for the chosen one no later than 5 days from the date of publication of the ranking in the online University Register.







The Winning Applicant for a position on a Ph.D. research course with a general theme who is already enrolled on the Course will be required to accept the position on a Ph.D. research course with a specific theme with a grant/scholarship, if those above him or her in the ranking renounce the offered position.

Grants/Scholarships for specific research themes will not be awarded if there are no Winning Applicants for the relevant Ph.D. research course with a specific theme.

General Positions on Ph.D. research courses, with or without a grant, and positions on a Ph.D. research course with a grant/scholarship subject to a specific research theme will be awarded by Rector's decree to Applicants who are at the top their rankings up to the number of positions available for each Course, based on the principles and according to the procedures described above.

For those Ph.D. research courses that provide positions (with or without scholarship) reserved for Applicants who have graduated abroad, in the event that nobody who graduated abroad qualifies, the University of Salento will proceed, pursuant to the combined provisions of the article 8, paragraph 2, penultimate period of the D.M. (ministerial decree) no. 45/2013 and paragraphs 4 and with paragraph 1 of the same article 8 to assign the reserved place to the ordinary ranking of suitable Applicants.

If two or more Applicants are awarded the same final mark, the youngest Applicant has precedence in accordance with article 2, paragraph 9, of Italian Law no. 191/98.

Where a grant must also be awarded, however, the following criterion is applied: article 7, fourth paragraph of D.M. n. 224/99, namely the assessment of the Applicant's financial situation. In case of a tie, therefore, the scholarship will be awarded to the Winning Applicant in possession of a lower ISEE (level of income).

The rankings will be approved by the Rector by decree and published at www.unisalento.it in the "Dottorati di Ricerca" (Ph.D.) section via the link "Bandi e Concorsi" (Calls and Competitive Selection), as well as the in online section of the "Albo" (official register), which will be considered as official notification to Applicants.

This Administration will not send individual messages to interested parties considering the publication of the rankings in the forms and in the manner described above.

The number of places and scholarships announced with the aforementioned provision may be subject to a subsequent extension as a result of the participation of the University in competitive tenders, public notices issued by public or private entities or funding from private entities.

The procedures for assigning any and additional additional scholarships will be made on the basis of the rules contained in the same calls in which the University will participate, using, in the absence of indications to the contrary contained in the aforementioned calls, the general ranking of the competitions for admission to the 39th cycle of the research doctorate courses referred to in this announcement.







#### Article 10 - Enrollment on the Ph.D. research course

All winning Applicants admitted to the Ph.D. research course are required, under penalty of forfeiture, to proceed with online registration to the same, <u>within 10</u> days of the date of publication of the rankings on the University website www.unisalento.it in the section dedicated to "Dottorati di Ricerca" (Ph.D.) via the link *Bandi e Concorsi* (Calls and Competitive Selection), and in the online *Albo* (Official register), following the procedures that will be indicated in a special document that will be published together with the decree approving the workings of the Admissions Board.

To enrol on the course all Winning Applicants (including Winners of grants/scholarships) will also have to pay, within the peremptory term of 15 days of the date of publication of the rankings on the University website www.unisalento.it in the section dedicated to "Dottorati di Ricerca" (Ph.D.) via the link Bandi e Concorsi (Calls and Competitive Selection), and in the online Albo (Official register), in a single payment the Puglian (Apulian) regional tax for "diritto allo studio" (Right to Education).

### Winning Applicants will not be contacted individually.

The deadline indicated in the previous paragraph (<u>term of 15 days</u>) is the last within which to have obtained the qualification in the case of candidates who have submitted an application with reserve.

Winner Applicants who fail to register for the first year within the time limits indicated above will be considered to have tacitly renounced their position.

The University of Salento at any time of the procedure and also after the start of the Ph.D. research course, may carry out targeted and random checks, under article DPR 71 (presidential decree) no.445 of 28 December 2000, regarding the information and declarations produced by the Applicants, regarding the validity of the documents attached by the Applicants to the online application and it may also request the original of the aforementioned documents.

The University of Salento can decide at any time, with appropriate motivation, to exclude Applicants from the competitive selection procedure due to an absence of the requisites required by the call for applications.

#### Art. 11) Renunciations and Scrolling of the Rankings

In the event of renunciation or withdrawal by the Winning Applicant for a position (with or without grant) the position that has become available will be assigned by Rector's decree according to the order of the rankings.

In case of scrolling, the succeeding winners will have a period of 5 days from the individual notification of the scrolling to proceed with the acceptance of the relevant place.







The deadline for proceeding with the scrolling of the ranking is of 90 days from the start date of the course, with the exception of the hypothesis of additional places with scholarship funded by external bodies or resulting from the participation of the University in selective procedures.

### Article 12) Grants, rights and obligations of Ph.D. students

Successful winning Applicants must also declare are in their applications:

- that they have not previously received any other grants/scholarships for the attendance of a Ph.D. research course;
- that they will undertake not to cumulate the amount of the grant/scholarship with any other grant/scholarship for any reason whatsoever, except with those explicitly granted, in addition to the Ph.D. research course grant/scholarship, by national or international institutions to allow training or research abroad or anywhere else away from the seat of the Ph.D. research course;

Scholarships will last one year and shall be renewed provided that the student has completed the course of activities for the previous year, subject to the obligation to disburse the grant/scholarship after passing the evaluation to be carried out by the Academic Board by September 31th of each academic year.

The confirmation of the grant/scholarship for the years subsequent to the first is done by formal resolution of the Academic Board of the Ph.D. research course in question.

A negative judgment on the part of the Academic Board will result in the forfeiture of the doctorate.

The amount of the grant is determined by the Ministry of Education, Universities and Research (MIUR) n. 247 on February.

This amount may be adjusted with any increase envisaged by law and by ministerial norms and regulations on the subject. The duration of the scholarship is equal to that of the Ph.D. research course (three years).

The scholarships funded by IIT are higher than the standard amount, established by the agreement signed with the Institute.

The grant is paid by means of monthly payments, in arrears.

The amount of the scholarship is increased by 50% for any periods of residence abroad, from a minimum of 20 consecutive days to a maximum of 12 months, except as provided for in the case of special agreements.

The Ph.D. research course has a duration of three years.

Students are required to attend the courses and carry out the teaching, study and research activities envisaged by the Academic Board and to present, at the end of each year of said course, to the Academic Board, a report on the research activity carried out and the results achieved, in the terms and in the manner established by the Academic Board itself and on the basis of the indications contained in the







operational indications issued by the Rector with protocol no. 42975, on 03/27/2020.

The evaluation of the Ph.D. students' activities must be carried out by the Academic Board at least once a year, generally within 30 days from the end of the Ph.D. research course year.

The presentation of the thesis for the final exam must take place within the deadline set by article 19 of the Ph.D. regulations currently in force. The Academic Board will submit the thesis to the assessors only in the event of a positive judgment granted to the candidate's course of studies and the achievement of the necessary ECTS in the three years of the course.

For anything not specified in this article about the rights and duties of Ph.D. students and the institution of the interruption, suspension, revocation or withdrawal from the Course, please refer to the provisions article 22 of the regulations in force regarding Ph.D. research courses issued by Rector's decree no. 433/2022.

# Article 13) Exemption from contribution for accessing and attending the Course

All students enrolled in Ph.D. research courses are exempt from the payment of fees for access and attendance of the said courses with the exception of the regional tax provided for in the following article and the stamp duty required by law.

#### Art . 14) Regional tax for the Right to Education

All students enrolled in the Course of study will have to annually pay the amount of the regional tax for the Right to Education in accordance with the amounts set annually by the Puglia region Right to Education agency (ADISU) pursuant to art. 11 of Italian Regional Law (Puglia) 45/2012.

The amounts to be paid will vary on account of the student's ISEE (level of income) values at the time of enrolment:

Regional right-to-study	ISEE (level of income) values
tax	
€ 120,00	Students with ISEE equal or inferior to €23.000,00
€ 140,00	Students with ISEE between € 23.001,00 ed €
	46.000,00
€ 160,00	Students with ISEE superior to € 46.000,00

In case of failure to indicate their ISEE value, the student will be liable to the highest level of regional tax (€ 160,00).

The amount of the regional tax for the Right to Education and the values for the ISEE bands may be subject to change according to regional regulations.

In such a case, further details will be communicated.







### Article 15) Exemption for Ph.D. students with disabilities

Specific forms of total or partial exemption from the payment of taxes and / or contributions for disabled students are envisaged, both with a degree of disability, following the Italian scale of diability, equal to or greater than 66%, and with disability between 31% and 65%.

Students with a recognized disability equal to or greater than 66% are exempt from paying taxes and contributions.

Students with disabilities between 31% and 65% benefit from a partial exemption from the registration fee with linear application until it is zeroed for percentages greater than or equal to 65%.

### Art. 16) Intellectual property of research results and publications

Without prejudice to the Italian copyright law (Legislative Decree 633/1941 and subsequent modifications), The intellectual and industrial property rights regarding the results achieved by the PhD student, including, by way of example and not limited to, software, industrial inventions, whether patentable or not, know-how, models, data and data collections, are regulated in accordance with the current legislation and the University regulations and, possibly, on the basis of what is established in the individual agreements with the universities, companies or entities involved.

### Article 17) Procedure for attaining a "Dottorato di ricerca"

The procedures relating to the presentation of the Ph.D. thesis and the appointment of the Evaluators and Final Examination Board are contained in the guidelines for the conferment of the title of "Dottorato di ricerca" attached to the D.R. (Rector's decree) n. 105, on 02/21/2017.

The timing of the presentation of the doctoral thesis is instead fixed by article 19, third paragraph of the current Ph.D. research course regulations issued by Rector's decree n. 433/2022.

#### **Article 18) Final Thesis**

Ph.D. theses must be in digital format in order to allow their filing, as required by law at the National Libraries of Rome and Florence and at the University of Salento open-access institutional archive if it is already active and available.

The conferment of the certificate of attainment of the title of "Dottorato di Ricerca" is dependent on the depositing, by the interested party, of the final thesis in the University of Salento open-access institutional archive which will guarantee its preservation and availability for public consultation and which will deposit the said thesis, as required by law, at the National Libraries of Rome and Florence.







### Article 19) Accessibility of Ph.D. theses

Accessibility to the Ph.D. thesis in the University of Salento open-access institutional archive may be subject to restrictions, for the following reasons:

- a) parts of the thesis have already been submitted to a publisher or are awaiting publication;
- b) the thesis contains sensitive content data (article 4 of decree n. 196, June 30, 2003);
- c) the thesis is financed by external entities that have rights over it and over its publication;
- d) parts of the thesis have been discussed at a date that is earlier than the discussion and thus subject to patent protection;

In the cases referred to in letter b), the thesis will only be made available if it is possible to make the data anonymous.

As for the other cases, there could be a 12-month suspension of free access, but only after the Academic Board has expressed its approval and following a reasoned request on the part of the student countersigned by his/her tutor.

The suspension of free access can be extended, with a similar procedure, for a further 6 months. Any request for a longer suspension period, in any case not exceeding three years, in exceptional and duly justified cases will be evaluated by the Rector.

At the end of the suspension period, the thesis will however be made freely available for consultation.

#### **Article 20) Reference Regulations**

Those matters which are not covered by this call for applications are subject to the rules laid down in the University Regulations for the establishment and organization of Ph.D. research courses (DR. Rectors decree no. 433/2022).

The following applies to public employees enrolled in the Ph.D. research courses: article 2, paragraph 1, of Italian Law no. 476/84 as recently amended with Italian Law n. 240/2010.

This call for applications contains an English translation that cannot be used for legal purposes and is exclusively designed to assist foreign Applicants.

### **Article 21) Privacy policy**

Article 13 of Italian Law no. 196 (30 June 2003) establishes that the personal data provided by the Applicants to the University of Salento at the time of application shall be used exclusively for institutional purposes and for the completion of any inherent procedures conducted by the persons carrying out the competitive selection procedure, also by the Admissions Board (at the University of Salento, Ufficio Master e Dottorati), even with the use of computerized procedures, in the manner and within the limits required for the above purposes, even in the event of any communication to third parties pursuant to current national and EU







legislation. Providing such information is necessary to assess the Applicants' eligibility and qualifications and failiure to do so may preclude such an assessment. Applicants are entitled to various rights under article 7 of the Italian Law no. n. 196/03, in particular, the right to access their personal information, to request correction, supplementation and cancellation if such information is incomplete, incorrect or collected in violation of the law, and to oppose their processing for legitimate reasons by directing requests to the Rector of the University of Salento, Prof.Fabio Pollice Piazzetta Tancredi 7-73100 Lecce.

The complete information on the processing of personal data can be viewed at the following address:

https://www.unisalento.it/documents/20143/970815/Informativa+trattamento+dati+degli+studenti.pdf/b6722c1f-170f-a094-5ba8-98abf4a5ba2e

# Article 22) Responsible parties for the application and competitive selection Procedure

The Master and Dottorati Office at the Università del Salento is responsible for any procedural aspect related to this call for applications.

The person in charge of the administrative procedure and data processing is indicated in the attached sheets (A - O).

One can also contact the Ufficio Master e Dottorati at the following telephone numbers +39 (0)832/9210-9211-9238-9041-9232, e-mail addresses: master.dottorati@unisalento.it

Foreign applicants can request information on the admission procedures to the PhD competition to the **WELCOME OFFICE** welcome.office@unisalento.it

#### **Article 23) Final Provisions**

This call for applications will also be advertised by electronic means on the site www.unisalento.it in the "News" section and in the "Dottorati di Ricerca / Bandi per Dottorati di Ricerca" section, as well as on the European Euraxess website and on the Italian Ministry of Education, Universities and Research (MUR) website.

The Rector (Prof. Fabio POLLICE)



"Account Microsoft Teams".





#### Annex 2

(for Phd courses that take place online for all candidates)

SUBJECT:	Competitive	• • • • • • • • • • • • • • • • • • • •		39 th cy	cle. Accou	nt for	an ir	nterview	via
	MICROSOFT	TEAMS – 	Name	and	surname	of	the	applic	ant:
To the pers	son responsib	le for the a	dmissio	ns pro	cedure				
The un applicant):_	dersigned, teln the competiti	(insert	name _, born a mail	and at	surn	ame . hav	, ving	of residen applied	the t in l to
participate i	n the competiti	ive selection	procedur	e for a	dmission	to the	e PhI	) Cours	e in
		IN	DICATE	S					
$\square$ the following mail account for the interview via a video call using the "Microsoft TEAMS" system (write clearly and legibly):									
N.B. This form	n must be attach	ed by the cand	didate in th	ne telen	natic platfor	m in t	the se	ction na	med







### (Annex 3)

ECT: Co	mpetitive	selection	procedure	for	the	PhD in
de	gree obtained	d and the ex	ams - Name	and surn	ame of the	he applicant:
	To the	person res	ponsible for	r the adm	issions p	orocedure
dersigne	d (insert nam , having a the PhD Cou	ne and surnar , resident applied to par arse	me of the appinrticipate in th	olicant): , tel. e competit	ive selecti	, mail on procedure
		DEC	CLARES			
tained th	e follow Adm	ission qualifi	cation:			
Name o	of the award	ing institut	<b>ion:</b> Univers	ity of		
Name	of	th	e	degree	р	rogramme:
					esumed	graduation
Final m	ark:				-	
				abla fan		l
	ım and ma sity					system:
	dersigned the stained the stai	degree obtained  To the  dersigned (insert name), having a sission to the PhD Countries and the follow Admit adments of the award Type of degree (the e.g. M. Sc., M. phil., etc.  Name of  Date in which the date:	degree obtained and the ex	To the person responsible for dersigned (insert name and surname of the appring president in, resident in, having applied to participate in the dission to the PhD Course  DECLARES  tained the follow Admission qualification:  Name of the awarding institution: Univers  Type of degree (the applicants must insert the e.g. M. Sc., M. phil., etc.,):  Name of the degree has been awarding in which the degree has been awarding i	To the person responsible for the adm  dersigned (insert name and surname of the applicant):, resident in, tel, having applied to participate in the competit hission to the PhD Course  DECLARES  tained the follow Admission qualification:  Name of the awarding institution: University of  Type of degree (the applicants must insert the type of the e.g. M. Sc., M. phil., etc.):  Name of the degree	dersigned (insert name and surname of the applicant):

N.B. This form must be attached by the candidate in the telematic platform in the section named "Autocert. esami/Self certification exams"







### (Annex 4)

# (only and exclusively for Phd Courses that are not already held online for all candidates)

<b>SUBJECT</b> : Competitive selection procedure for the PhD in						
To the person responsible for the admissions procedure						
The undersigned (insert name and surname of the applicant):, born at, resident in, tel, mail, having applied to participate in the competitive selection procedure for admission to the PhD Course in						
DECLARES						
That he / she						
is resident or living outside Italy and precisely at the location below						
Or that he / she						
is employed or engaged outside Italy on the date set for the interview for the following motives or to be unable to be present in person in the date and place planned for the interview						
Therefore, he or she requests, pursuant to the provisions of article 8 of the call for applications to the competitive selection procedure which he or she has read carefully and in its entirety and according to the procedures specified therein, to be allowed to conduct the interview remotely via a video call using the "Microsoft TEAMS" system and indicates the following mail account (write clearly and legibly):						
The undersigned assumes responsibility, pursuant to articles 46 and 47 of DR Presidential Decree) no. 445/2000, for the declarations made and the files attached to the online application, in full knowledge of criminal sanctions resulting from false attestations and / or false declarations.						
Date Signature						

N.B. A valid identity document must be attached to this form, to be completed according to the terms of article 5 of the call for applications for the competitive selection procedure. This form must be sent to the email address of the <a href="mailto:protocollo@unisalento.it">protocollo@unisalento.it</a> within the deadline of the call for applications.







### All. F)

### CORSO DI DOTTORATO IN "INGEGNERIA DEI SISTEMI COMPLESSI"

(Phd Course in "Engineering of complex systems")

Dipartimento proponente	Ingegneria dell'Innovazione
Department	Engineering for Innovation
Coordinatore	Prof. Gianpiero Colangelo - tel. 0832/299440
Coordinator	Mail: gianpiero.colangelo@unisalento.it
<u>Durata</u>	3 anni
Total duration	3 years
<u>Posti e borse di studio</u>	Numero complessivo di posti 28
	Posti da assegnarsi nell'ambito della graduatoria generale: 2
	- borsa di studio su fondi del Progetto PRO3 1
	- senza borsa di studio 1
	Posti a tematica vincolata: 26
	Costituiscono posti a tematica vincolata i seguenti:
	- posti con borsa PNRR ex D.M. 118/2023 4
	- posti con borsa PNRR ex D.M. 117/2023, cofinanziati da imprese <b>20</b>
	- posto con borsa finanziato al 100% da imprese o enti esterni 1
	- posto con borsa su fondi di Progetto su tematica vincolata (prof. Corallo) 1
	Il valore delle borse di studio su convenzione o progetto corrisponde all'importo indicato dal DM n. 247/2022 ed è quindi equivalente a quello delle borse bandite sui fondi d'Ateneo.  I candidati interessati alle posizioni a tematica vincolata (comprese in 9 aree tematiche che raggruppano le borse su tematiche di ricerca omogenee) dovranno dichiarare nella
	domanda il loro eventuale interesse per massimo 2 delle 9 aree indicate.  I candidati che concorrono per posizioni a tematica vincolata verranno inseriti sia nella graduatoria generale che nelle graduatorie separate, relative alle aree tematiche prescelte.







L'assegnazione delle singole borse a ciascun vincitore, all'interno delle varie Aree tematiche, verrà effettuata dal Collegio dei Docenti, sentiti i candidati idonei collocati in posizione utile nella graduatoria separata per l'area tematica indicata, nell'ordine stabilito dalla medesima.

### Non è possibile essere selezionati per borse a tematica vincolata, se non si indica esplicitamente nella domanda la relativa area tematica, selezionando l'apposita opzione che ne consente la partecipazione.

I candidati dichiarati vincitori delle borse tematiche escono dalla graduatoria generale, che verrà poi utilizzata per assegnare la borsa PRO3, e si impegnano a rispettare le regole previste dalla convenzione tra Università del Salento ed ente finanziatore.

<u>L'accesso a posizioni a tematica vincolata è comunque condizionato al raggiungimento del punteggio minimo per l'ammissione al corso.</u>

# Di seguito sono indicati n. 9 gruppi di borse affini a tematica vincolata raggruppati in AREE TEMATICHE per i quali i candidati possono presentare domanda.

Il candidato parteciperà in automatico per le borse a tematica generale e potrà scegliere fino a due AREE TEMATICHE (che raggruppano un certo numero di borse a tematica vincolata di seguito specificate).

Per ciascuna AREA TEMATICA (da n. 1 a. 9) sarà predisposta un'autonoma e distinta graduatoria.

# Posti finanziati a valere sul PNRR - ex D.M. 118/2023

#### Area tematica 1 (1 borsa)

1.1) Modelli e strumenti per lo studio dell'adattamento ai cambiamenti climatici della città con utilizzo delle tecniche di big data e intelligenza artificiale. OBIETTIVO: i cambiamenti climatici hanno evidenti impatti sulle città, in particolare per gli aspetti legati al rischio idrogeologico e le isole di calore. Modelli basati sui dati e l'intelligenza artificiale possono migliorare l'efficacia del monitoraggio e la previsione di questi fenomeni, per cui obiettivo della ricerca sarà quello di studiare modelli e strumenti digitali basati su intelligenza artificiale e la raccolta di dati dal campo al fine di realizzare un servizio del digital twin della città su questi aspetti.







## Area tematica 2: Gestione del patrimonio edilizio delle P.A. (2 borse)

2.1) L'obiettivo del lavoro di dottorato sarà potenziare la capacità amministrativa per la formulazione e il disegno delle politiche interne volte alla gestione della riqualificazione energetica ed ambientale di un vasto patrimonio immobiliare pubblico esistente e da realizzare. Ciò sarà ottenuto attraverso lo sviluppo delle competenze diagnostiche e della manutenzione nonché preventiva programmata, attraverso l'implementazione di sistemi smart per la gestione del patrimonio edilizio e adozione di strategie e piani di azione specifici per la promozione della digitalizzazione pubbliche amministrazioni. Tali permetteranno maggiore velocità nell'erogazione dei la riduzione dei costi operativi, semplificazione delle procedure amministrative. Questo contribuirà a promuovere la transizione digitale ed ecologica delle pubbliche amministrazioni, favorendo la riorganizzazione e la semplificazione dei modelli organizzativi, nonché dei processi di selezione e adozione di tecnologie e soluzioni. L'obiettivo ultimo è garantire una maggiore efficacia, efficienza economicità nell'azione pubblica, sia per โล riqualificazione energetica ed ambientale del Patrimonio Pubblico esistente, in particolare nel Social Housing, sia per le nuove costruzioni. Attività in collaborazione con Arca Sud Salento.

2.2) Sviluppo e diffusione di best practices per la diffusione delle comunità energetiche nel Social Housing. La povertà energetica è un problema che colpisce molti individui e comunità in tutto il mondo. Le comunità energetiche possono svolgere un ruolo importante nel mitigare la povertà energetica e garantire l'accesso all'energia a prezzi accessibili per tutti. Il programma di dottorato si concentra sulla transizione energetica e sul ruolo delle comunità energetiche nella promozione di sistemi energetici sostenibili, definendo politiche energetiche inclusive, programmi e schemi di finanziamento. L'obiettivo è quello di concepire una "transizione energetica giusta" tramite un processo basato sul dialogo e un'agenda per un quadro partecipativo che dia priorità ai bisogni e alle preoccupazioni dei residenti locali, in particolare dei soggetti vulnerabili. Coinvolgere le comunità, dal basso verso l'alto, è fondamentale anche per realizzare il pieno potenziale delle fonti di energia rinnovabile e dare priorità al feedback delle popolazioni locali sull'idoneità di alcuni sviluppi del progetto, oltre a stabilire un processo di filiera inclusivo e giusto." Attività in collaborazione con Arca Sud Salento.

# <u>Area tematica 3: Ingegneria industriale</u> (n. 1 borsa)

3.1) Tecnologie ad alta efficienza per l'idrogeno per energia e propulsione a emissioni zero. Questa attività coinvolge ricerca, sviluppo e test di sistemi ad alta efficienza basati sull'idrogeno per la generazione di







energia e la propulsione. Questi sistemi possono essere applicati in una vasta gamma di settori, tra cui il trasporto (come navi, treni e veicoli), i processi industriali centrali elettriche. e le L'attività si concentrerà sullo sviluppo di tecnologie per la produzione e lo stoccaggio dell'idrogeno da integrare direttamente nei sistemi di alimentazione propulsione. Si esplorano metodi efficienti e sostenibili di produzione dell'idrogeno, come la plasmolisi anche utilizzando fonti di energia rinnovabile. Vengono inoltre studiati avanzati sistemi di stoccaggio dell'idrogeno, tra cui l'idrogeno compresso e i trasportatori di idrogeno, per garantire un approvvigionamento sicuro e affidabile.

Per convalidare le prestazioni e la fattibilità di queste tecnologie, verranno condotti ampi test, modellizzazione e simulazioni. Ciò aiuta a ottimizzare l'efficienza del sistema, identificare sfide potenziali e sviluppare strategie di mitigazione.

### <u>Posti con borsa ex D.M. 117 cofinanziati dal</u> <u>MUR e dalle imprese</u>

# <u>Area tematica 4: Ingegneria industriale</u> (3 borse)

#### 4.1) 1 borsa cofinanziata da STC S.r.l.

Sistemi di riduzioni di ossidi metallici mediante atmosfere riducenti a basso contenuto di carbonio.

#### 4.2) 1 borsa cofinanziata da GE Avio srl

Miglioramento dei processi di asportazione di truciolo di semilavorati con durezze via via crescenti prodotti a partire da tecnologie convenzionali e non; recupero del materiale asportato orientato alla sostenibilità di processi caratterizzati da una complessità spinta a causa delle caratteristiche di lavorabilità dei materiali di interesse

#### 4.3) 1 borsa cofinanziata da Micad S.r.l.

Approcci sinergici di progettazione e ottimizzazione per una migliore idrodinamica e propulsione nelle navi eco-sostenibili.

#### Area tematica <u>5: Ingegneria</u> <u>dell'informazione</u> (7 borse)

#### 5.1) 1 borsa cofinanziata da MedITech

Modelli e tecniche di gestione delle risorse e dei servizi dati per la realizzazione di data space in contesti edgecloud.

#### 5.2) 1 borsa cofinanziata da FoolFarm







Meccanismi certificati e intelligenti di condivisione online e offline di informazioni tramite one time programming con polverizzazione del dato in ottica Web3.

- 5.3) 2 borse cofinanziate da Echolight Spa
- a) Caratterizzazione tissutale avanzata mediante tecniche di intelligenza artificiale applicate all'imaging ecografico
- b) Beamformer ecografico ottimizzato e algoritmi di signal/image processing per diagnostica medica avanzata

#### 5.4) 1 borsa cofinanziata da FIWARE Foundation

Models and techniques for managing smart data models in distributed scenarios of edge – cloud computing. The research activity will be focused on the investigation of the data models evolution and the design of novel approaches and tools for the compliance of collected data against the smart data models, even using entity resolution techniques.

- 5.5) 2 borse cofinanziate da Seros Invest Energy s.r.l.
- a) Metodi per la caratterizzazione strumentale e collaudi dei sistemi fotovoltaici
- b) Misure ed ottimizzazione del rendimento dei sistemi basati su pirolisi

### Area tematica 6: Ingegneria gestionale (n. 7 borse)

6.1) 1 borsa cofinanziata da GE Avio srl

Sviluppo di sistemi per la gestione del ciclo di vita del prodotto aeronautico in scenari distribuiti geograficamente, resilienti e ad alta complessità funzionale

6.2) 1 borsa cofinanziata da Altea S.p.A.

Identificazione di modelli di innovazione per aziende operanti nel settore della System Integration ICT, definizione delle modalità di misurazione dell'efficacia dei progetti di innovazione e degli incentivi da attivare per il coinvolgimento dei collaboratori interni

6.3) 1 borsa cofinanziata da N&C s.r.l. Sistemi di navigazione indoor e Intelligenza artificiale







6.4) 1 borsa cofinanziata da XENIA PROGETTI S.R.L.

Ottimizzazione della gestione dei processi anche con l'ausilio di tecnologie innovative quali il machine learning, la computer vision e l'intelligenza artificiale.

6.5) 1 borsa cofinanziata da DELOITTE Consulting srl

Generative AI a supporto dei processi aziendali in ambito industry.

6.6) 1 borsa cofinanziata da AICOM spa

Applicazione di tecnologie innovative (BIM, AI, etc) ai processi progettuali e manutentivi di infrastrutture ed assets industriali complessi.

6.7) 1 borsa cofinanziata da Nuovo Pignone Tecnologie srl

Implementazione di equazioni di stato di fluidi di processo (in forma pura e di miscela) all'interno dei selezionatori di pompe a valvole.

# <u>Area tematica 7: Centro i-STORE</u> (n. 3 borse)

7.1) 2 borse cofinanziate da ISASI-CNR:

Metodologie di intelligenza artificiale e Tecnologie IoT per la navigazione autonoma di un drone marino.

7.2) 1 borsa cofinanziata da IBEEE srl

Metodologie di computer vision e pattern recognition per lo sviluppo di modelli computazionali per la stima degli immobili

#### <u>Posti finanziati al 100% da Ditte o Enti</u> <u>esterni</u>

#### Area tematica 8: Bruno Kessler (n. 1 borsa)

**8.1** Fully integrated ASIC for silicon radiation detectors in CMOS technology for low-noise and high-rate applications.

<u>Posti finanziati al 100% su tematica vincolata (Fondi progetto Prof. Corallo)</u>

Area tematica 9 (n. 1 borsa):







9.1 Analisi, definizione e validazione di modelli innovativi di supply chain management basati sull'uso della tecnologia digitale per la gestione sostenibile delle catene del valore complesse durante la transizione verso la quinta rivoluzione industriale.

ENGLISH VERSION

Positions and scholarships

Number of positions

#### **General positions**

28

2

- Scholarships on University budget (PRO3)
- Ph.D. Positions without scholarship

### <u>Positions with a pre-defined topic:</u> 26

- Scholarships funded on D.M. 118
- Scholarships funded on D.M. 117, cofounded by private companies 20
- Scholarships funded by external companies 1
- Scholarships funded by Project budget (Prof. Corallo) 1

Scholarships funded by private companies or project funds are equivalent to those funded on University resources, equal to the minimum required by the current regulation of the Italian Ministry for Education.

Scholarships with a pre-defined topic are grouped into 9 research areas. The interested candidates must apply up to 2 of the 9 research areas, explicitly indicating their option(s) on the application form.

Candidates to specific positions will also be evaluated within the general list, but a separate shortlist will be defined by the selection committee for each research area of positions with a preselected topic. The Ph.D. Board will assign the specific research theme and the associated scholarship to the candidates of the separate short list for the area, after hearing them.

It is not possible to be shortlisted for scholarships with a pre-defined topic, if the interest for the research area is not







#### <u>explicitly stated in the application form by</u> <u>selecting the corresponding option, within</u> <u>the application procedure.</u>

The PhD candidates selected for one of the research areas grouping positions with predefined topics are taken out of the general list. They will comply with rules and requirements stated in the agreement between the University of Salento and the funding company.

The thresholds for admission to the Ph.D. course are applied to all candidates, including the candidates applying to reserved positions.

### <u>Position funded on D.M. 118</u> Research Area No. 1 (n. 1 grant)

1.1) Models and tools for investigating climate change in cities using big data and artificial intelligence. Objective: Hydrogeological risks and Urban Heat Zones (UHZs) are severely impacted by climate change. Data driven models and Artificial Intelligence may improve monitoring and forecasting of these phenomena. Therefore, the aim of the research is to investigate novel digital technologies and nature based approaches to develop a component of the urban digital twin.

# Research Area No. 2: Management of the building stock of P.A (n. 2 grants)

2.1) The objective of the doctoral research is to administrative capacity enhance for formulation and design of internal policies aimed at managing the energy and environmental requalification of a vast existing and planned public real estate portfolio. This will be achieved through the development of diagnostic skills and programmed preventive maintenance, as well as the implementation of smart systems for real estate management and the adoption of specific strategies and action plans to promote the digitization of public administrations. These actions will enable faster service delivery, reduction in operational costs, and simplification of administrative procedures. This will contribute to promoting the digital and ecological transition public administrations, fostering reorganization and simplification of organizational models, as well as the processes of selecting and adopting technologies and solutions. The ultimate goal is to ensure greater effectiveness, efficiency, and cost-effectiveness in public action, both for the energy and environmental requalification of the existing public portfolio, particularly in Social







Housing, and for new constructions. In collaboration with *Arca Sud Salento*.

2.2) Development and Dissemination of Best Practices for the Implementation of Energy Communities in Social Housing. Energy poverty is a problem that affects many individuals and communities worldwide. Energy communities can play a significant role in mitigating energy poverty and ensuring access to affordable energy for all. The doctoral program focuses on energy transition and the role of energy communities in promoting sustainable energy systems, defining inclusive energy policies, financing programs, and schemes. The objective is to conceive a "just energy transition" through a dialogue-based process and an agenda for a participatory framework that prioritizes the needs and concerns of local residents, especially vulnerable groups. Engaging communities from the bottom-up is crucial to realizing the full potential of renewable energy sources and prioritizing feedback from local populations on the suitability of certain project developments, as well as establishing an inclusive equitable supply chain process. collaboration with Arca Sud Salento.

# Research Area 3: Industrial Engineering (n. 1 grant)

3.1) High-Efficiency Hydrogen Technologies for Zero Emission Power and Propulsion. This activity involves research, development, and testing of high-efficiency hydrogen-based systems for power generation and propulsion. These systems can be applied in a wide range of sectors, including transportation (such as ships, trains, and vehicles), industrial processes, and power plants. The activity will focus on the development of hydrogen production and storage technologies to be directly integrated to the power and propulsion systems. Efficient and sustainable methods of producing hydrogen, such as plasmolysis also using renewable energy sources, are explored. Advanced hydrogen storage systems, including compressed hydrogen and hydrogen carriers, are also investigated to ensure safe and reliable supply. To validate the performance and feasibility of these technologies, extensive testing, modeling, and simulation will be conducted. This helps in optimizing system efficiency, identifying potential challenges, and developing mitigation strategies.







#### Positions funded on D.M. 117

# Research Area 4: Industrial Engineering (n. 3 positions)

4.1) n. 1 position cofounded by STC S.r.l.

Emissions reduction in hard to abate industries.

4.2) n. 1 position cofounded by GE Avio srl

Improvement of machining processes related to semi-finished products with increasing hardness, produced from conventional and non-conventional technologies; recovery of the removed material having as objective the improvement of the sustainability of processes characterized by high complexity in terms of the materials of interest workability.

4.3) n. 1 position cofounded by Micad S.r.l.

Synergistic Design and Optimization Approaches for Enhanced Hydrodynamics and Propulsion in Eco-friendly Ships

# Research Area 5: Information Technologies (n. 7 positions)

#### 5.1) n. 1 position cofounded by MedITech

Models and tools for resource and data management in the developmento of data spaces in edge-cloud contexts

#### 5.2) n. 1 position cofounded by FoolFarm

Smart and certified mechanisms for offline and online information sharing through one time programming with data crumbling and Web3 architecture

- 5.3) n. 2 positions cofounded by Echolight Spa
- a) Advanced tissue characterization using artificial intelligence techniques applied to ultrasound imaging.
- b) Optimized ultrasound beamformer and signal/image processing algorithms for advanced medical diagnostics

# 5.4) <u>n. 1 position cofounded by FIWARE Foundation</u>

Models and techniques for managing smart data models in distributed scenarios of edge – cloud computing. The research activity will be focused on the investigation of the data models evolution and the design of novel approaches and tools for the compliance of collected







data against the smart data models, even using entity resolution techniques.

- 5.5) <u>n. 2 positions cofounded by Seros Invest Energy</u> <u>s.r.l.</u>
- a) Methods for instrumental characterization and testing of photovoltaic systems
- b) Measurements and performance optimization of pyrolysis-based systems.

# Research Area 6: Management Engineering (n. 7 positions)

### 6.1) n. 1 position cofounded by GE Avio srl

Lifecycle management systems for aeronautical products developed in geographically distributed and highly functionally complex scenarios.

#### 6.2) n. 1 position cofounded by Altea S.p.A.

Innovation models devoted to employes engagement and projects innovation measurement in ICT System Integration companies

#### 6.3) n. 1 position cofounded by N&C s.r.l.

Artificial Intelligence-enabled indoor navigation systems

# 6.4) <u>n. 1 position cofounded by XENIA PROGETTI S.R.L.</u>

Process management optimization enhanced by artificial intelligence.

# 6.5) <u>n. 1 position cofounded by DELOITTE Consulting srl</u>

Generative Artificial Intelligence supporting process improvement in industrial context.

#### 6.6) n. 1 position cofounded by AICOM spa

Innovative technologies improving the design and maintenance processes of infrastructures and complex industrial assets.

# 6.7) <u>n. 1 position cofounded by Nuovo Pignone Tecnologie srl</u>

Development of state equations of fluids inside valve pump selectors

Research Area 7: i-STORE Centre, (n. 3 positions)







### 7.1) n. 2 positions cofounded by ISASI-CNR

Artificial intelligence methodologies and IoT technologies for the autonomous navigation of a marine drone

#### 7.2) <u>n. 1 position cofounded by IBEEE srl</u>

Computer vision and pattern recognition methodologies for the development of computational models for property valuation

### Positions funded by external companies

# Research Area 8: Bruno Kessler (n. $\underline{1}$ position)

**8.1** Fully integrated ASIC for silicon radiation detectors in CMOS technology for low-noise and high-rate applications.

### Positions funded by Prof. Corallo Project

#### Research Area 9 (n. 1 position):

9.1. Innovative and sustainable supply chain management models based on digital technology in the context of complex industry.

### Tematiche di ricerca

Negli ultimi anni la complessità dei prodotti è aumentata esponenzialmente in tutti i campi dell'ingegneria, al fine di migliorare caratteristiche e/o funzioni di prodotti esistenti (e.g. il crescente impiego di elettronica in ambito automotive), per creare prodotti innovativi (dispositivi e sensori organizzati in reti, velivoli autonomi, smart materials, etc.) o nuovi sistemi di produzione e/o distribuzione di beni e servizi (smart grids, smart factories, smart cities, ecc.). Il Corso di Dottorato sviluppa le competenze necessarie alla gestione di un tale livello di complessità per la progettazione e l'analisi di prodotti o sistemi che non nascono più giustapposizione di saperi, dall'interazione di culture tecnico-scientifiche diverse in ambiti multidisciplinari.

Lo spettro di competenze all'interno del Collegio, i cui membri vantano contatti sia con realtà produttive del territorio che con grandi compagnie nazionali e multinazionali, nonché collaborazioni con enti di ricerca nazionali ed esteri, consente di affrontare molteplici problemi complessi di natura funzionale, progettuale e produttiva.







Research themes

Viene quindi formato personale con un alto livello di qualificazione, una solida preparazione in diverse branche dell'ingegneria e delle scienze di base e una chiara conoscenza dei problemi legati all'innovazione scientifica e tecnologica. Durante il triennio l'allievo segue corsi di formazione generale e applicativi e svolge una ricerca autonoma, calata in un ambito ampio, inter- e multi-disciplinare, maturando competenze individuali da spendere in contesti articolati e complessi per lo sviluppo di soluzioni originali ad alto tasso di innovazione tecnologica.

*In the last few years, system complexity has been* growing exponentially, with the objective of improving characteristics and functions existing products (e.g. automotive industry increasingly relying on ICT), delivering new products and services (distributed systems of sensors, possibly operating in networks, UAV's, smart materials, etc.), and novel systems for production and distribution of goods and services (smart grids, smart factories, smart cities, etc.). The Ph.D. course aims at developing those capabilities necessary for managing this deep level of interaction between diverse technical backgrounds. The design process no longer hinges on a sequential process, with different technical aspects considered one at the time. Nowadays, new opportunities for innovation are created by the interaction between different fields.

A wide spectrum of diverse know-hows within the Ph.D. program Committee, contacts with industries and a network of national and international collaborations with universities and research centers allows challenging our Ph.D. students on various problems of different nature in different technical frameworks, related to basic research, design, and production.

At the end of the program a highly qualified expert will be formed, with a solid background, derived from the courses that he/she will be exposed to during the three years program. The courses cover engineering disciplines and applied sciences. In the end, a good understanding of problems and challenges that characterize scientific and technological innovation Thecandidate will develop an expected. autonomous research pattern in a wider multidisciplinary context, within which he/she will be able to apply his/her expertise, in order to develop original and technologically innovative solutions to old and new problems.







#### Requisiti di partecipazione

- Laurea quinquennale (ante DM 509/1999) o Laurea Specialistica/Magistrale (ex DM 509/1999 e DM 270/2004) nelle seguenti discipline:

LM-3 Architettura del paesaggio

LM-4 Architettura e ingegneria edile-architettura

LM-4 c.u. Architettura e ingegneria edile-architettura (quinquennale) LM-6 Biologia

LM-7 Biotecnologie agrarie

LM-8 Biotecnologie industriali

LM-9 Biotecnologie mediche, veterinarie e farmaceutiche

LM-11 Scienze per la conservazione dei beni culturali

LM-12 Design

LM-13 Farmacia e farmacia industriale

LM-16 Finanza

LM-17 Fisica

LM-18 Informatica

LM-19 Informazione e sistemi editoriali

LM-20 Ingegneria aerospaziale e astronautica

LM-21 Ingegneria biomedica

LM-22 Ingegneria chimica

LM-23 Ingegneria civile

LM-24 Ingegneria dei sistemi edilizi

LM-25 Ingegneria dell'automazione

LM-26 Ingegneria della sicurezza

LM-27 Ingegneria delle telecomunicazioni

LM-28 Ingegneria elettrica

LM-29 Ingegneria elettronica

LM-30 Ingegneria energetica e nucleare

LM-31 Ingegneria gestionale

LM-32 Ingegneria informatica

LM-33 Ingegneria meccanica

LM-34 Ingegneria navale

LM-35 Ingegneria per l'ambiente e il territorio

LM-40 Matematica

LM-43 Metodologie informatiche per le discipline umanistiche

LM-44 Modellistica matematico-fisica per l'ingegneria

LM-48 Pianificazione territoriale urbanistica e ambientale

LM-49 Progettazione e gestione dei sistemi turistici

LM-53 Scienza e ingegneria dei materiali

LM-54 Scienze chimiche

LM-56 Scienze dell'economia

LM-58 Scienze dell'universo

LM-60 Scienze della natura

LM-66 Sicurezza informatica

LM-69 Scienze e tecnologie agrarie

LM-70 Scienze e tecnologie alimentari

LM-71 Scienze e tecnologie della chimica industriale

LM-72 Scienze e tecnologie della navigazione

LM-73 Scienze e tecnologie forestali ed ambientali

LM-74 Scienze e tecnologie geologiche

LM-75 Scienze e tecnologie per l'ambiente e il territorio

LM-76 Scienze economiche per l'ambiente e la cultura

LM-77 Scienze economico-aziendali

LM-79 Scienze geofisiche

LM-82 Scienze statistiche

LM-83 Scienze statistiche attuariali e finanziarie







LM-91 Tecniche e metodi per la societa dell'informazione

LM Sc. Mat. Scienze dei materiali

LM Data science

LM-53. Ingegneria dei materiali

3/S (specialistiche in architettura del paesaggio)

4/S (specialistiche in architettura e ingegneria edile)

6/S (specialistiche in biologia)

7/S (specialistiche in biotecnologie agrarie)

8/S (specialistiche in biotecnologie industriali)

9/S (specialistiche in biotecnologie mediche, veterinarie e farmaceutiche) 19/S (specialistiche in finanza)

20/S (specialistiche in fisica)

23/S (specialistiche in informatica)

24/S (specialistiche in informatica per le discipline umanistiche)

25/S (specialistiche in ingegneria aerospaziale e astronautica)

26/S (specialistiche in ingegneria biomedica)

27/S (specialistiche in ingegneria chimica)

28/S (specialistiche in ingegneria civile)

29/S (specialistiche in ingegneria dell'automazione)

30/S (specialistiche in ingegneria delle telecomunicazioni)

31/S (specialistiche in ingegneria elettrica)

32/S (specialistiche in ingegneria elettronica)

33/S (specialistiche in ingegneria energetica e nucleare)

34/S (specialistiche in ingegneria gestionale)

35/S (specialistiche in ingegneria informatica)

36/S (specialistiche in ingegneria meccanica)

37/S (specialistiche in ingegneria navale)

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

45/S (specialistiche in matematica)

48/S (specialistiche in metodi per l'analisi valutativa dei sistemi complessi) 50/S (specialistiche in modellistica matematico-fisica per l'ingegneria) 54/S (specialistiche in pianificazione territoriale urbanistica e ambientale) 61/S (specialistiche in scienza e ingegneria dei materiali)

62/S (specialistiche in scienze chimiche)

64/S (specialistiche in scienze dell'economia)

66/S (specialistiche in scienze dell'universo)

68/S (specialistiche in scienze della natura)

80/S (specialistiche in scienze e tecnologie dei sistemi di navigazione) 81/S (specialistiche in scienze e tecnologie della chimica industriale)

82/S (specialistiche in scienze e tecnologie per l'ambiente e il territorio) 83/S (specialistiche in scienze economiche per l'ambiente e la cultura) 84/S (specialistiche in scienze economico-aziendali)

90/S (specialistiche in statistica demografica e sociale) 91/S (specialistiche in statistica economica, finanziaria ed attuariale)

92/S (specialistiche in statistica per la ricerca sperimentale)

100/S (specialistiche in tecniche e metodi per la società dell'informazione) 103/S (specialistiche in teorie e metodi del disegno industriale)







	<ul> <li>Altro titolo dichiarato equivalente o equipollente ai sensi della normativa vigente per la partecipazione ai pubblici concorsi.</li> <li>Titolo analogo conseguito presso Università straniere legalmente riconosciute.</li> </ul>
Requirements for admission	For foreign students: Degree equivalent to a Master in Engineering or Master of Science, equivalent to one of the Master Degree titles listed above recognized under the Italian rule of law.
Modalità di selezione	Valutazione titoli, progetto di ricerca e colloquio
	Valutazione dei titoli (max 10/100): - max 6 punti per il curriculum studiorum (saranno valutati i seguenti elementi: esami e voti, incluso voto di laurea, se disponibile, durata del percorso formativo); - max 2 punti per percorsi formativi post-laurea, master e altri titoli conseguiti; - max 2 punti per pubblicazioni scientifiche pertinenti alle tematiche del dottorato. I candidati al concorso dovranno, pertanto, allegare obbligatoriamente nella voce "altri titoli" presente nella procedura telematica e pena la non valutazione, la documentazione attestante il proprio percorso di studi, ivi comprese le informazioni relative alla durata dei relativi Corsi.
Selection procedure	Evaluation scores for CV and education (max 10/100)  - 6 points max for master degree (the selection committee will evaluate the exam list and marks, mark for the final degree, if applicable, duration of the course);  - 2 points max for other courses completed;  - 2 points max for scientific publications on topics relevant for the Ph. D. course.  Progetto di ricerca (max 45/100) (massimo 20 000 caratteri – spazi inclusi – su una tematica ad autonoma scelta del candidato, all'interno degli obiettivi formativi e ambiti disciplinari del dottorato) Al colloquio sono ammessi i candidati che abbiano riportato nella valutazione del progetto un punteggio minimo di 30.  Research project (20 000 characters maximum – including spaces – on a topic relevant for the
	Ph.D. research areas and themes).







Admission to the oral exam if the candidates obtain a mark for the research project equal or higher than 30.

### <u>Colloquio (max 45/100)</u>

*Oral exam (max 45/100)* 

Il colloquio sarà volto a verificare la preparazione del candidato e l'attitudine alla ricerca su tematiche oggetto del dottorato.

Durante il colloquio, per tutti i candidati, italiani e stranieri, verrà valutata la conoscenza della lingua inglese. La valutazione della conoscenza della lingua inglese prevede l'assegnazione di un punteggio massimo **pari a 10/100** da ricomprendersi nel punteggio massimo conseguibile al colloquio.

Il colloquio si considera utilmente superato ove il candidato riporti un punteggio pari ad almeno 30/100.

The oral exam is aimed at evaluating the technical background of the candidate and his/her potential on the research topics of the course.

Proficiency in the use of English language is evaluated at this stage. A maximum of 10 points is awarded for English proficiency, within the total score for the oral exam.

To pass the interview the candidates need to achieve a score equal to or greater than 30 points.

# <u>Lingua nella quale possono essere svolte le prove</u>

Il curriculum e il progetto di ricerca possono essere presentati in italiano o in inglese (per candidati italiani e stranieri). Il colloquio si svolgerà in italiano, con verifica delle conoscenze della lingua inglese, per i candidati italiani; per quelli stranieri il colloquio si svolgerà in inglese

Language for project and oral exam

Both Italian and foreign candidates can write their CV and research project in Italian or English language. The oral exam will be in Italian for Italian candidates; adequate knowledge of English will be evaluated. The oral exam will be in English for foreign candidates.

### <u>Pubblicazione elenco dei</u> <u>candidati ammessi al colloquio</u>

La lista dei candidati ammessi al colloquio sarà pubblicato <u>il 14 Settembre 2023</u> sul sito web del Dipartimento di Ingegneria dell'Innovazione al link:

https://www.dii.unisalento.it/







Shortlist of candidates for the oral exam	The list of those who are admitted to the interview will be published by <b>the 14 of September 2023</b> on the website of the Department:
	https://www.dii.unisalento.it/
Data di svolgimento del colloquio	Il colloquio si svolgerà in data <u>18/09/2023</u> , ore <b>9.00</b>
Selection procedure timeline	oral examination: <u>18/09/2023</u> , <b>9.00 a.m</b> .
Modalità di svolgimento del colloquio	Il colloquio sarà svolto per tutti i candidati ammessi in modalità telematica
	Nell'ipotesi di ammissione al colloquio il candidato riceverà un invito dalla Commissione a far parte del gruppo creato tramite la piattaforma indicata. Anche a tal fine, il candidato è tenuto obbligatoriamente a fornire già nel c.v. allegato alla domanda di partecipazione al concorso un valido account mail, associato a un'utenza Microsoft valida, a installare su un proprio dispositivo il software della piattaforma indicata e a dotarsi di una webcam che ne consenta l'identificazione prima della prova orale.
Method of conducting the interview	The interviews will be held in teleconference mode by means of Microsoft TEAMS platform
	After being shortlisted, the selected candidates will receive an invitation to a "team" created for the platform. It is thus required for admission that the candidates indicate within the CV an e-mail address associated to a valid Microsoft account, install the software necessary for the call. A webcam is required for the identification procedure, prior to the oral exam.
Sito web in cui reperire le informazioni in ordine all'esito del progetto, alla valutazione dei titoli ed all'ammissione al colloquio	sito web del Dipartimento di Ingegneria dell'Innovazione: <a href="https://www.dii.unisalento.it/">https://www.dii.unisalento.it/</a>
Website of the Department for informations of the ranking of admitted candidates to the interview	Website of Department of Engineering for Innovation <a href="https://www.dii.unisalento.it/">https://www.dii.unisalento.it/</a>
Sito web di Ateneo in cui reperire il bando di ammissione al concorso, il decreto di nomina	Sito di Ateneo: <u>www.unisalento.it</u> – sezione Bandi e concorsi – concorsi – Ricerca – Bandi per dottorati di ricerca







Commissione e le graduatorie definitive della selezione approvate con Decreto rettorale  University website	University website: <u>www.unisalento.it</u> – section "Bandi e concorsi – concorsi – Ricerca – Bandi per dottorati di ricerca"
Responsabile amministrativo del procedimento di selezione	Avv. Andrea Cuna, tel. 0832/299232 – email: andrea.cuna@unisalento.it
Administrative person responsible for the selection procedures	master.dottorati@unisalento.it