



SUBJECT: Public competition for admission to the National PhD course in Micro- and Nano-Electronics – 38th cycle - academic year 2022/2023

THE RECTOR

- CONSIDERING** Law n. 210 of July 3, 1998, art. 4;
- CONSIDERING** Law n. 240 of December 30, 2010, art. 19;
- CONSIDERING** the Ministerial Decree n. 226 of December 14, 2021;
- CONSIDERING** the University of Pavia Statute;
- CONSIDERING** the University of Pavia “Regulations for PhD courses” n. 900 of April 11, 2022 and subsequent modifications;
- CONSIDERING** the Ministerial Decree n. 247 of February 23, 2022;
- CONSIDERING** the resolution of the Academic Senate of March 21, 2022;
- CONSIDERING** the resolution of the Administrative Council of March 29, 2022;
- CONSIDERING** the interim decree n. 1252 of May 25, 2022, ratified by the Administrative Council of the University of Pavia on May 30, 2022;
- CONSIDERING** the agreements for the activation of the National PhD course in Micro- and Nano-Electronics, subscribed by the University of Pavia and the following universities:
- Polytechnic of Bari;
 - Polytechnic of Torino;
 - University of Cagliari;
 - University of Catania;



- University of Milano-Bicocca;
- University of Modena and Reggio Emilia;
- University of Padova;
- University of Pisa;
- University of Roma “La Sapienza”
- University of Salento;

CONSIDERING

the need to issue the call for applications for public competitions to be admitted to the to the National PhD course in Micro- and Nano-Electronics – 38th cycle, administered by the University of Pavia

DECREES

Art. 1
Activation

1. The University of Pavia hereby announces public competitions for admission to the National PhD course in Micro- and Nano-Electronics – 38th cycle, academic year 2022/2023, administered by the University of Pavia, in collaboration with the following affiliated universities:
 - Polytechnic of Bari;
 - Polytechnic of Torino;
 - University of Cagliari;
 - University of Catania;
 - University of Milano-Bicocca;
 - University of Modena and Reggio Emilia;
 - University of Padova;
 - University of Pisa;
 - University of Roma “La Sapienza”;
 - University of Salento.
2. Annex 1, which forms an integral part of this call, specifies the locations, the coordinator of the PhD course, the positions available, the scholarships and other funding, the selection procedure and qualifications assessed, the admission test timetable and the programs offered.
3. The PhD course has a legal duration of three years, starting from **November 1, 2022**.



4. The PhD course activation is subject to the completion of the accreditation procedure by ANVUR. Therefore, the selections will be carried out only for the PhD courses that have received the accreditation or its confirmation by the Ministry.
5. The number of PhD positions mentioned in Annex 1 may vary, with subsequent provisions, according to additional funding made available after the publication of this call. In any case, the deadline for applications will remain unchanged.
6. The funding provided by external entities will be assigned provided an agreement is reached between the University and the entity involved.
7. **This call for applications is equivalent to a notification to all intents and purposes. Further modifications, updates or additions to its content will be announced exclusively on the <http://phd.unipv.it/> website.**
8. The presentation of the application as outlined in art. 5 implies the acceptance by the candidate of the rules contained in this call for applications. Failure to respect these rules will result in the candidate being excluded from the competition.

Art. 2

Admission requirements

1. Applications are invited from candidates, regardless of age and nationality:
 - a. who hold an Italian *"diploma di laurea ante D.M. 509/1999 (vecchio ordinamento)/laurea specialistica/laurea magistrale"*, or an equivalent second-level degree issued by an AFAM (*Alta Formazione Artistica e Musicale*) institution;
 - b. who hold an academic degree awarded abroad and recognised by the examining Committee as being eligible for the selected PhD competition purpose only. Such degree must be comparable to an Italian second-level degree in terms of duration, level and disciplinary field. During the application procedure, candidates will be asked to upload, in addition to the qualifications required for the specific PhD course, the following documents, in order for their foreign degree to be recognised as eligible:
 - i. in case of italian and EU citizens: self-declaration, pursuant to D.P.R. 445/2000 and subsequent modifications, of all their academic degrees, including the courses attended, the marks received and the legal duration of the degree courses;
 - ii. in case of non-EU citizens: certificates of all their university degrees, in Italian or English, including the courses attended, the marks received and the legal duration of the degree courses. In case of certificates in a language different from Italian or English candidates will have to submit, together with the certificates, their sworn and legalized translation into Italian or English.
 - iii. any other document relevant to the assessment of a degree's eligibility, such as a Diploma Supplement or Dichiarazione di Valore in Loco.



The candidate may be required at any time to submit further documents, in order to verify the eligibility of his/her degree;

- c. who expect to receive the degree mentioned in para. a and b no later than the date of enrolment in the PhD course. **Failure to attain the degree within the date of enrolment in the PhD course will result in candidates being excluded from the PhD course.** Such candidates, if successful, will be conditionally admitted and enrolled in the PhD course and will be required to submit by e-mail (concorso-dottorati@unipv.it) to the University administration office, no later than the date of enrolment in the PhD course:
 - i. in case of degree attained in Italy: a self-declaration, conforming to the model available at <http://phd.unipv.it/micro-nano-electronics-38/>, testifying they have attained the degree, together with copy of a valid identity document;
 - ii. in case of degree attained abroad:
 1. in case of italian or EU citizens: a self-declaration, conforming to the model available at <http://phd.unipv.it/micro-nano-electronics-38/>, testifying they have attained the degree, together with copy of a valid identity document;
 2. in case of non-EU citizens: a certificate in Italian or English language testifying the degree attainment. In case of certificates in a language different from Italian or English candidates will have to submit, together with the certificates, their sworn and legalized translation into Italian or English.

Art. 3

Additional PhD reserved to candidates employed by companies, institutes or public research centres in highly qualified positions

1. Employees of companies, institutes or public research centres in highly qualified positions may undertake, while keeping their job position and stipend, a PhD course. Such candidates' training objectives and research activities are arranged between the University and the company, institute or public research centre by means of a specific agreement. A member of the company can take part in the selection procedure. Candidates' interviews will include a discussion of the research topics proposed by the company. A separate ranking list is drawn up for these candidates. The agreement between the University and the company must be formalised no later than August 31, 2022. It will specify, among other things, the conditions and nature of the research to be carried out at the company, institute or public research centre and the division of the employee's time.
2. Candidates interested in these positions must select the appropriate administrative category during the application procedure, if available for their chosen PhD course.



Art. 4

Additional positions reserved to candidates with a scholarship from a foreign country

1. The "Additional positions reserved to candidates with a scholarship from a foreign country" are reserved to candidates holding, at the time of the enrollment onto the PhD course, a scholarship of the same duration of a PhD course. The University of Pavia does not provide PhD scholarships for such positions. Applications for the "Additional positions reserved to candidates with a scholarship from a foreign country" and the "Additional positions reserved to candidates holding a scholarship from a specific international mobility program" will be subject to a check by the University administration on the actual availability of the funding whose ownership is declared by the candidate. Candidates will be selected through a qualification assessment and, unless otherwise specified in Annex 1 for the specific PhD course, will also undertake an interview via videoconference, aimed at verifying candidates' competence, ability and aptitude for research as well as their knowledge of Italian and/or English. Candidates must select the appropriate administrative category, if available for their chosen PhD course, during the application procedure. The examining committee will draw up specific reports and separate ranking lists.

Art. 5

Applications

1. Candidates who wish to participate in a PhD competition at the University of Pavia must **apply online** by the deadline of **July 29, 2022 at 12:00 (CET)**. **Applications can only be made via the online procedure in the candidates' Personal Area** at the following link: https://studentonline.unipv.it/esse3/Home.do?cod_lingua=eng. Applications submitted via any other means will not be considered. Candidates are responsible for ensuring that their application has been completed accurately and in full; complaints related to the malfunctioning of the online procedure will not be accepted. Candidates are highly recommended to complete the online application well in advance of the application deadline. Candidates must **pay the application fee**, amounting to **€ 35.00, by July 29, 2022**. **Failure to pay the admission fee by the deadline will result in candidates being excluded from the competition. Under no circumstances will the admission fee be refunded.**
2. Candidates must be registered at https://studentonline.unipv.it/esse3/Home.do?cod_lingua=eng in order to access the online application procedure. Candidates who have yet to register must select the "Registration" tab and insert the requested data; then, by selecting the "Login" item and entering the username and password provided by the system, they will be able to access their Personal Area and apply for the PhD competitions.

Candidates who have already registered on the University of Pavia website must select only the "Login" tab and access the Personal Area by entering the username and password already in their possession. **Candidates are requested to check and update their personal information**



already present in the database, in particular the residence and the e-mail address which will be used for all communications related to the PhD competition.

In order to submit the application, candidates have to select the “Admissions” item from the top right menu, then, from the same menu, the “Admission test” item, and then the PhD competition in which they would like to take part.

During the application procedure, candidates must:

- enter the information regarding their degree course and the details of a valid identity document; a copy of the same identity document will have to be uploaded during the application procedure;
- choose the administrative category for which they intend to apply;
- if available for the administrative category of their choice, fill in the questionnaire expressing their preference for a **maximum of five PhD positions** among those listed in the call;
- attach, via an upload, proof of the qualifications required (seen Annex 1) and the identity document whose details were entered during the procedure.

Qualifications and documents must be attached as .pdf files and must not exceed 5MB each. Each file's denomination must bear the candidate's surname and the type of the qualification (e.g. surname_curriculumvitae).

Candidates will have to prove they are in possession of the qualifications¹ issued by the Public Administration by means of a self-declaration, pursuant to art. 46 of D.P.R. 445/2000. The self-declaration must be duly dated and subscribed. The self-declaration regarding the exams taken must conform to the model available at <http://phd.unipv.it/micro-nano-electronics-38/> or, if available, it can be downloaded from the website of the institution where the degree was awarded. The self-declaration must bear all information requested in Annex 1 for the PhD course for which the candidate is applying. **Non-EU applicants in possession of qualifications awarded by a non-Italian institution cannot submit a self-declaration, but must attach to the application a copy of the relevant certificates.**

A self-declaration uploaded in the application portal, to be valid and hence considered for evaluation by the Committee, must be signed with one of the following modalities:

- digital signature, in a format recognized by the Italian Digital Administration Code (CAD)
- original signature on a paper document, then scanned

¹ Pursuant to D.P.R. n. 445 of December 28, 2000 and subsequent modifications, Italian and EU citizens must provide a self-declaration attesting the following conditions and facts certified by the Italian Public Administration:

- a. enrolment in professional organisations or on lists managed by Italian Public Administration;
- b. membership of professional associations;
- c. qualifications and exams taken;
- d. professional qualifications, post-graduate qualifications, qualifying exams, training courses, refresher courses and technical qualifications;
- e. student status.



and accompanied by a copy of a valid identity document. In the absence of one of these features, the document will be invalid.

The Committee will not consider for evaluation any of the following documents: unsigned curriculum vitae; invalid self-declarations; certificates, copies of diplomas, diploma supplements issued by an Italian Public Administration. Certificates issued by private entities are considered as valid.

With the exception of the degree required for admission (see art. 2, para. 1), all further qualifications must have been obtained by the deadline for applications.

The examining committee will take into consideration only the qualifications listed in Annex 1 (p. 18 ff.) for each PhD course.

Candidates with a disability (under the provisions of Law n. 104 of February 5, 1992 integrated by Law n. 17 of January 28, 1999) or affected by a Specific Learning Disability (under the provisions of Law n. 170 of October 8, 2010) should make a specific request in their application for the necessary assistance and, if required, for extra time to complete the selection tests. Candidates with disabilities are required to submit a medical certificate issued by the competent health authorities via the medical committees. Candidates with Specific Learning Disabilities must submit an appropriate clinical certificate issued no more than three years before by the National Health Service. Regions where it is not possible to diagnose such disorders as part of the specialist treatments carried out by the National Health Service can commit, within the limits of their human, instrumental and economic resources, the same diagnosis to a specialist or accredited structure. The documents testifying the disability must be submitted to the Centro Servizio di Ateneo - Servizio di Assistenza e Integrazione per gli Studenti Disabili e con DSA "SAISD" (Assistance and Integration Service for Students with Disabilities or Special Learning Disabilities) at least 15 days before the test in one of the following ways:

- hand-delivery to the SAISD office during the opening times (available at <https://saisd.unipv.it/index.php/en/contacts/>);
- e-mail to disabili@unipv.it, together with a copy of a valid identity document;
- fax to +39 0382/984954;
- registered letter with acknowledgement of receipt to: Centro Servizio di Ateneo - Servizio di Assistenza e Integrazione per gli Studenti Disabili e con DSA "SAISD" - P.zza Leonardo Da Vinci n. 16 – Pavia – Italy.

Based on the documents submitted by the candidate, the Vice-Rector for Disabilities and Special Needs, in coordination with the examining committee, will decide on the possible assistance and the extra time granted for the tests.

After the completion of the online application and before the deadline for applications (**July 29, 2022 at 12:00, CET**), candidates will be able to:

- modify the data previously entered. **The modifications will be permanently saved provided that the candidate brings the full application again to a conclusion.** At the end of the application procedure, candidates will have to reprint the application form;
- add, cancel or modify the documents uploaded (qualifications and identity document) by using the "Enter/modify qualifications" button;



- add, cancel or modify the data of the chosen referee/s, in case the reference letter/s is/are included among the qualifications assessed for the selected PhD competition (see Annex 1, p. 18 ff.), and possibly send a reminder to the referee/s already inserted. **The modifications will be permanently saved provided that the candidate brings the full application again to a conclusion.**

After the deadline for applications, modification or addition to the data or to the documents will be no longer possible.

If the PhD office notices irregularities or omissions in the documents uploaded by the candidates during the application, the candidates concerned will be duly informed via e-mail and will have the opportunity to regularize the documents within a peremptory deadline set by the office.

At the end of the procedure, candidates must print the application form and **pay by July 29, 2022 the participation fee of € 35.00. Failure to pay the application fee by the deadline will result in candidates being excluded from the competition.** The participation fee must be paid via the PagoPA system, with one of the following methods:

- **direct payment** (credit cards or bank transfers through the affiliated banks) in the "Payments" section of your Personal Area, by clicking on the invoice number, then on the "Pay by PagoPA" button;
 - **deferred payment**, bringing your PagoPA invoice to a bank, a post office, a SISAL or Lottomatica point, or using your home banking system. Candidates can print the invoice in their Reserved Area, by clicking on the invoice number and then on the button "Print notice for PagoPA".
3. **The application form must be printed and hand-delivered to the examining committee on the day of the first on-site test (the written test if scheduled, otherwise the interview). Candidates who will not take any on-site test must send the signed application form, along with a copy of a valid identity document, to concorso-dottorati@unipv.it by the date of the interview.**
 4. After the deadline for applications, the University administration will check the validity of the applications received and verify that the application fee of € 35.00 has been paid within the deadline. **In cases of invalid applications, or where the payment has not been made within the deadline, the candidate will be excluded from the competition.** On the <http://phd.unipv.it/micro-nano-electronics-38/> website the list of the candidates admitted to the selection procedure will be published for each PhD course.
 5. Candidates who wish to take part in more than one competition will have to submit a separate application for each, together with the qualification certificates requested, and pay a participation fee for each PhD competition selected.
 6. All applicants are conditionally admitted to the PhD competitions while the University administration office checks that they actually possess the requirements provided in this call for applications, pursuant to D.P.R. n. 445/2000, artt. 43 and 71. The University administration reserves the right, at any time, to exclude candidates from the selection procedure. The University administration will also check the veracity of candidates' self-declarations:



candidates found to have made false declarations may face criminal proceedings and administrative sanctions, pursuant to art. 76 of D.P.R. 445/2000.

Art. 6 EDiSU benefits

1. PhD students, pursuant to D.P.C.M. of April 9, 2001, are entitled to enjoy, under the same conditions of the other students, the benefits offered by the University of Pavia's EDiSU (Institution for the Right to Study).
2. Candidates who wish to enjoy these benefits (scholarships, accommodation, reduced meal prices at canteens etc.) must consult the <http://www.edisu.pv.it/> website where the call for applications for the above-mentioned benefits will be advertised. Candidates are allowed to apply for the EDiSU benefits before the PhD competition and before their possible enrolment in the PhD course.

Art. 7 Examining Committee

1. The Committee in charge of the PhD competition is appointed by the Rector in accordance with the University of Pavia "Regulations for PhD courses".
2. One or more members of the Committee can take part in the selection procedure via videoconference. In compliance with art. 11 para. 3 of the Ministerial Decree n. 226/2021, the composition of the Committee is such as to ensure the participation of members from abroad or external to the affiliated universities. With regard to the selection for specific positions, the Committee may request the opinion of experts, even if not belonging to universities or public research bodies, in possession of high scientific or professional qualification in research fields consistent with those of the PhD course.
3. The composition of the examining Committee will be published, after the announcement deadline has passed, on the <http://phd.unipv.it/micro-nano-electronics-38/> website.

Art. 8 Selection procedure

1. Admission to the PhD course is subject to the passing of a selection procedure aimed at assessing candidates' competence, ability and aptitude for research. In Annex 1 the tests dates and locations, selection procedures and notes for each PhD competition are listed.
2. Candidates will be selected based on a qualifications assessment and an interview. The examining committee can assign up to 20 points for candidates' qualifications, divided as specified in Annex 1. The results of the qualifications assessment will be announced before



the interview, with the modalities and timing indicated in Annex 1. The interview includes a verification of candidates' knowledge of the English language. The examining committee may assign up to 30 points as an interview points scale. The interview is deemed successful if a candidate obtains a score of 21 points or more.

3. The examining committee will draw up specific reports. Candidates will be ranked in descending order by totaling the scores obtained by each candidate in the scheduled tests and the qualifications assessment.
4. If candidates have an identical score on the ranking list, the positions with scholarship will be awarded on a means basis, pursuant to D.P.C.M. of April 9, 2001 and subsequent modifications and additions; for positions without a scholarship, the youngest candidate will have it.
5. The President of the Committee will submit to the University Administration the competition reports.
6. **The admission tests schedule, indicated in Annex 1 of this call, is equivalent to a notification to applicants. Possible modifications in the dates and locations of the tests will be announced on the <http://phd.unipv.it/micro-nano-electronics-38/> website. Candidates will not receive any further communication from the University administration office.**
7. On the day of the on-site tests, candidates will be asked to show a valid identity document.
8. **Failure to take part in the admission tests will be considered as constituting a withdrawal from the application process.**

Art. 9

Admission to the PhD course

1. The Rector, by Rectoral Decree, acts to verify the validity of the competition records and approves the ranking lists. Candidates who have placed highly on each ranking list are declared winners, provided they meet the admission requirements for access to the PhD competition and enrolment onto a PhD course.
2. Candidates are admitted to the PhD course in the ranking list order until all positions are taken. Should a candidate decide not to take up his/her place before the start of the course, their place may be taken by other candidates following the ranking list order.

Art. 10

Public Administration employees

1. Prevailing laws regarding time off work or special leave will apply to any public administration employees admitted onto a PhD course.



**Art. 11
Enrolment**

1. The ranking lists will be published on the University's official noticeboard <http://www-5.unipv.it/alboufficiale/> and on the https://studentionline.unipv.it/esse3/Home.do?cod_lingua=eng website. In order to check their results, candidates have to login by entering the username and password provided at the end of the registration procedure, click on "Admissions" from the top right menu and then on "Admission test". **Candidates will not be informed personally: the publication of the ranking list is equivalent to an official notice to applicants.**
2. Candidates can appeal against the approval of the ranking list to the TAR (Regional Administrative Tribunal) within 60 days from the publication of the results on the University's official noticeboard, or make a special appeal to the President of the Republic within 120 days; in the absence of an appeal, the provision shall be incontrovertible.
3. **Successful applicants must enrol** in the PhD course by following the instructions provided at <http://phd.unipv.it/micro-nano-electronics-38/>.
4. Successful applicants who do not yet hold the second-level degree necessary to enrol in a PhD course will be conditionally admitted. By the date of enrolment in the PhD course they will have to provide the University Administration office with proof of graduation by following the procedure described in Art. 2, para. 1.
5. Candidates in possession of an academic degree obtained in a non-EU country, if successful, will have to provide the University administration, within a deadline agreed with the office, the following documents:
 - a. legalized degree certificates, bearing the list of the exams taken during their academic career and the marks obtained;
 - b. the original "*Dichiarazione di Valore in Loco*", issued by the competent Italian diplomatic representative in the country where the academic qualification has been attained.

In case of documents in a language different from Italian or English candidates will have to submit, together with the original documents, their sworn and legalized translation into Italian or English. The University administration reserves the right to ask students to provide additional documents if necessary to carry out the appropriate checks on the degree. The Administration office also reserves the right to ask students holding a foreign degree obtained within the EU to provide the "*Dichiarazione di Valore in Loco*" in cases where its validity is doubted.
6. Upon enrolment, non-EU citizens must submit to the Administration office, within a deadline agreed with the office, a photocopy of their residence permit or application for the residence permit.
7. Successful candidates who have been awarded a PNRR scholarship must submit, at the time of the enrollment in the PhD course, a research project (max 5000 characters, spaces and bibliography not included).



8. Competition winners will have to pay, through the payment notice provided at the end of the application procedure, the enrollment fee, amounting to € 156.00.
9. Successful candidates with scholarship, **who do not enrol and pay the enrolment fee by the deadline of 5 days from the day following the publication online (https://studentionline.unipv.it/esse3/Home.do?cod_lingua=eng) of the ranking list**, will be considered as having **forsaken** their position.

Successful candidates without scholarship, **who do not enrol and pay the enrolment fee by the deadline of 7 days from the day following the publication online (https://studentionline.unipv.it/esse3/Home.do?cod_lingua=eng) of the ranking list**, will be considered as having **forsaken** their position.
10. In case of any renunciations of the entitled candidates before the beginning of the training activities of the PhD course, the positions will be proposed to the following successful candidates in the final ranking. These candidates will be duly informed by e-mail and, if interested, will have to enroll and pay the enrollment fee as per para. 7 within the peremptory deadline of three days from the receipt of the e-mail. After that time, the candidate will be considered as having forsaken the position.
11. The University Administration reserves the right to check the validity of winners' declarations. Any applicants found to have made false statements will lose the benefits deriving from these declarations.

Art. 12 Scholarships

1. Unless otherwise specified in Annex 1, the annual gross amount of a PhD scholarship is € 16,243.00, including the I.N.P.S. contribution that is at the expense of the scholarship holder. PhD scholarships are regulated by the provisions of Law n. 476 of August 13, 1984, art. 4.
2. The Rector, by Rectoral decree, awards the scholarships to the successful candidates following the order of the ranking lists and until all scholarships for the given PhD course have been assigned.
3. Scholarships have a duration of one year and are confirmed annually, provided that the student has been admitted to the following year by the Academic Board.
4. The scholarships are paid in monthly deferred installments.
5. The scholarship amount is increased by 50%, for a period not exceeding 12 months in total, in case of research periods carried out at foreign institutions, duly authorized in advance by the Academic Board. This period can be increased up to 18 months overall in case of PhD students in joint supervision with foreign universities or PhD programs activated in cooperation with the institutions mentioned in art. 3 para. 2 of the Ministerial Decree n. 226/2021.
6. PhD scholarships cannot be combined with other scholarships awarded for any reason whatsoever. The only exceptions are scholarships assigned by national or international bodies



to support with internships abroad the research activities. The compatibility of these scholarships with the PhD scholarship is decided by the Academic Board.

7. Students who have already benefited from a PhD scholarship, even partially, are not eligible for a second one.
8. To each PhD student, with or without scholarship, a budget for research activity in Italy and abroad is awarded, amounting to 10% of the scholarship, in accordance with the provisions of the Ministerial Decree n. 226/2021, art. 9.

Art. 13

PhD students' obligations

1. Admission onto a PhD course entails full-time and dedicated commitment. The Academic Board may set specific rules for PhD courses jointly supervised with companies, institutes or public research centres or students of medical specialization schools attending PhD courses.
2. The acceptance of scholarships labeled as PNRR implies the following obligations:
 - a. for basic PNRR scholarships, PhD students must spend a period of training and research abroad of at least six months;
 - b. for scholarships labeled as "PNRR PA", "PNRR Cultural Heritage" and "PNRR Digital and Environmental Transitions", PhD students must spend:
 - i. a period of training and research abroad of at least six months, and
 - ii. periods of training and research in companies, research centers or public administration from a minimum of six months to a maximum of twelve months;
 - c. for scholarships labeled as "PNRR DM 352", PhD students must spend:
 - i. a period of training and research abroad of at least six months, and
 - ii. periods of study and research in companies from a minimum of six months to as maximum of twelve months.

Art. 14

PhD students' teaching activity

1. Upon authorization of the Academic Board, the PhD students may act as a tutor, as well as fill a supplementary teaching role up to a maximum of 40 hours per academic year, as an integral part of their training project and without any increase of the amount of the PhD scholarship. The supplementary teaching roles are attributed by the Department Council, upon proposal of the professors in charge of the activities for which the collaborations are requested. PhD students in the medical area can take part in clinical and assistance activities.



2.

**Art. 15
Incompatibility**

1. For what concerns any incompatibilities, candidates are invited to refer to the laws in force.

**Art. 16
Ethical Code**

1. PhD students will have to abide by the provisions of the University of Pavia Code of Ethics, available at the following link: <https://web.unipv.it/ateneo/statuto-regolamenti/>.

**Art. 17
Final exam and attainment of the PhD degree**

1. The title of PhD ("Dottore di ricerca") is attained following a positive assessment of a research thesis which contributes to the progress of knowledge or methodology in the research field chosen by the PhD student. The thesis is publicly discussed in front of a committee appointed by the Rector.

Unless otherwise specified in Annex 1, the PhD degree is awarded by the Rector of the University of Pavia, jointly with the Rector of the affiliated university, if any.

2. The attainment of the PhD degree will be certified by the University administration after the upload of the complete version of their PhD theses in the University's electronic archives by the PhD graduate. The University will take care of depositing the theses, according with the current Italian laws, at the National Libraries of Roma and Firenze where they will be conserved and made available for public consultation.

**Art. 18
Use of personal data**

1. Pursuant to art. 13 of the General Data Protection Regulation (EU) 2016/679, the information supplied by candidates will be gathered by the University of Pavia's Research and Training for Research Unit and used for the management of the admission competitions and of the possible candidates' academic career. Granting consent for the handling of personal data is therefore obligatory and failure to do so will result in candidates' exclusion from the competition.
2. The information provided by the candidates will be communicated to the University of Pavia's administrative offices and to the departments directly concerned with the legal and financial positions of the successful candidates.



3. Candidates are entitled to the rights stated in art. 13 of the General Data Protection Regulation (EU) 2016/679, including access to their personal data, its modification, updating, integration, cancellation etc., and likewise reserve the right to oppose any use of the data other than the institutional purposes stated above.

Art. 19

Head of Administrative Procedures

1. The Manager of Administrative Procedures, under Law no. 241 of 7 August 1990 and subsequent modifications and additions, is Ms Sofia Baggini, Head of the Research and Third Mission Area. For information please contact the Training for Research Unit – Via Ferrata n. 5 – Pavia (Italy), tel. +39 0382-985021/4327/5983/5982/5937/5984, e-mail concorso-dottorati@unipv.it.

Art. 20

Final regulations

1. In relation to any issues not explicitly specified in this announcement, the provisions of existing Italian legislation on PhD courses and of the University of Pavia's "Regulations for PhD courses" n. 900 of April 11, 2022 apply.
2. Only the Italian version of this call for applications will be binding in case of controversies.

Pavia, register date



PhD COURSE
IN MICRO- AND NANO-ELECTRONICS

ADMINISTRATIVE SEAT: University of Pavia

AFFILIATED INSTITUTIONS:

- Polytechnic of Bari;
- Polytechnic of Torino;
- University of Cagliari;
- University of Catania;
- University of Milano-Bicocca;
- University of Modena and Reggio Emilia;
- University of Padova;
- University of Pisa;
- University of Roma "La Sapienza";
- University of Salento.

COORDINATOR: Prof. PIERO MALCOVATI

<p>POSITIONS WITH SCHOLARSHIP (Category 989)</p>	<p>8</p>	<p>3 scholarships funded by the University of Pavia; 1 scholarship funded under the project "Facing Global Challenges", to undertake research in "Microelectronics"; 1 scholarship funded by the Polytechnic of Bari; 2 scholarships funded by the University of Pisa; 1 scholarship funded by the University of Salento, to undertake research in "Analog to Digital Converters for 5G radios in FinFET technology".</p>
<p>POSITIONS WITH "PNRR DM 352" AT THE UNIVERSITY OF PAVIA (Category 989)</p>	<p>24</p>	<p>1 scholarship to undertake research in "Ultrafast Lythium Niobate Modulators for Quantum Communication", co-funded by Advanced Fiber Resources; 1 scholarship to undertake research in "Optimal On-Board-Charger Control Based on Wide-Bandgap-Semiconductors", co-funded by Allegro Microsystems; 1 scholarship to undertake research in "mm-Wave Integrated Circuits for 5G Applications", co-funded by ASR</p>



		<p>Microelectronics;</p> <p>1 scholarship to undertake research in “Optical RFIC”, co-funded by Huawei Technologies;</p> <p>2 scholarships to undertake research in “Wide Bandgap Power Switches and Innovative Driving Technology for Inverter Applications”, co-funded by Infineon Technologies;</p> <p>1 scholarship to undertake research in “Power Conversion Techniques for Power Management and Audio Applications”, co-funded by Inventvm;</p> <p>1 scholarship to undertake research in “Building Blocks for High Speed Electro-Optical Serial Links”, co-funded by Marvell Technology;</p> <p>2 scholarships to undertake research in “Design of Integrated Circuits for Sensors and Power Control”, co-funded by Photeon Technologies;</p> <p>12 scholarships to undertake research in “Design of Integrated Circuits”, co-funded by STMicroelectronics;</p> <p>1 scholarship to undertake research in “Circuits for High-Speed Serial Interfaces”, co-funded by Synopsys;</p> <p>1 scholarship to undertake research in “High Accuracy and Low Power Analog to Digital Converter for MEMS Application”, co-funded by TDK-Invensense.</p> <p>Please note that the acceptance of a PNRR scholarship implies obligations additional to those of a regular scholarship: see art. 13 of this call.</p>
<p>POSITIONS WITH “PNRR DM 351” AT THE POLYTECHNIC OF TORINO (Category 989)</p>		<p>1 scholarship to undertake research in “Micro- and nano-electronic circuits”.</p> <p>Please note that the acceptance of a PNRR scholarship implies obligations additional to those of a regular scholarship: see art. 13 of this call.</p>
<p>POSITIONS WITH “PNRR DM 352” AT THE UNIVERSITY OF CAGLIARI</p>	<p>1</p>	<p>1 scholarship to undertake research in “Low-power design of the digital part of SerDes devices based on high-speed ADC for optical and electrical interconnections”, in collaboration with Marvell Technology Italia.</p> <p>Please note that the acceptance of a PNRR scholarship implies</p>



(Category 989)		obligations additional to those of a regular scholarship: see art. 13 of this call.
POSITIONS WITH "PNRR DM 351" AT THE UNIVERSITY OF CATANIA (Category 989)	1	1 scholarship to undertake research in "Micro- and nano-electronic circuits". Please note that the acceptance of a PNRR scholarship implies obligations additional to those of a regular scholarship: see art. 13 of this call.
POSITIONS WITH "PNRR DM 352" AT THE UNIVERSITY OF CATANIA (Category 989)	3	3 scholarships to undertake research in "Design of Integrated Circuits", co-funded by STMicroelectronics. Please note that the acceptance of a PNRR scholarship implies obligations additional to those of a regular scholarship: see art. 13 of this call.
POSITIONS WITH "PNRR DM 351" AT THE UNIVERSITY OF MILANO-BICOCCA (Category 989)	2	2 scholarships to undertake research in "Micro- and nano-electronic circuits". Please note that the acceptance of a PNRR scholarship implies obligations additional to those of a regular scholarship: see art. 13 of this call.
POSITIONS WITH "PNRR DM 351" AT THE UNIVERSITY OF MODENA AND REGGIO EMILIA (Category 989)	1	1 scholarship to undertake research in "Design of CMOS RFIC for the quantum microprocessor". Please note that the acceptance of a PNRR scholarship implies obligations additional to those of a regular scholarship: see art. 13 of this call.
POSITIONS WITH "PNRR DM 351" AT THE UNIVERSITY OF PADOVA (Category 989)	1	1 scholarship to undertake research in "Advanced integrated circuits for mm-wave radar and wireless communication transceivers". Please note that the acceptance of a PNRR scholarship implies obligations additional to those of a regular scholarship: see art. 13 of this call.



POSITIONS WITH "PNRR DM 352" SCHOLARSHIP AT THE UNIVERSITY OF ROMA "LA SAPIENZA" (Category 989)	1	1 scholarship to undertake research in "Design of Microprocessors Equipped with Hardware Acceleration for Specific Applications and Support for Functional Safety", confounded by Inventvm. Please note that the acceptance of a PNRR scholarship implies obligations additional to those of a regular scholarship: see art. 13 of this call.
POSITIONS WITHOUT SCHOLARSHIP (Category 989)	1	
POSITIONS JOINTLY SUPERVISED WITH COMPANIES (Category 974)	3	2 positions jointly supervised with Infineon Technologies Italia s.r.l, located in Milano, Via dei Valtorta 48; 1 position jointly supervised with Silicon Austria Labs GmbH, located in Inffeldgasse 33, Graz (Austria). These positions are reserved to candidates already employed by the companies mentioned above.
POSITIONS RESERVED TO CANDIDATES WITH A SCHOLARSHIP FROM A FOREIGN COUNTRY (Category 977)	1	The "Additional positions reserved to candidates with a scholarship from a foreign country" are reserved to candidates holding, at the time of the enrollment onto the PhD course, a scholarship of the same duration of a PhD course. The University of Pavia does not provide PhD scholarships for these positions.
TOTAL POSITIONS	48	

ADMISSION PROCEDURE: qualifications assessment and interview via videoconference. Candidates are allowed to take the interview in English.

LINGUISTIC KNOWLEDGE: candidates' knowledge of English will be verified during the interview.

QUALIFICATIONS ASSESSMENT: UP TO 20 POINTS ARE ASSIGNED UPON ASSESSMENT OF EACH CANDIDATE'S QUALIFICATIONS, AS FOLLOWS:

- a. exams taken during the candidate's degree courses, bearing the mark (up to **10** points);
- b. scientific publications (up to **6** points);
- c. other qualifications considered as relevant (up to **4** points).



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The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

The results of the qualifications assessment will be published online no later than **September 5, 2022**. The results will be posted in the Personal Area of the candidates in the University website. This can be accessed using the login information provided at the end of the registration procedure.

INTERVIEW: October 4-7th 2022 - the test schedule will be made available at <http://phd.unipv.it> and <https://phd-mne.unipv.it/>

Before the interview, candidates will be asked to show a valid identity document. The University of Pavia does not take any responsibility for a candidate's failure to take the interview due to technical difficulties.

ASSIGNMENT OF POSITIONS: PhD positions will be assigned following the ranking order and considering, whereas possible, the preferences expressed by candidates during the application process.

INFORMATION: <https://phd-mne.unipv.it/>