



## SELECTION CALL FOR DOCTORAL PROGRAMS - XXXIX CYCLE UNIVERSITY OF INSUBRIA, ACADEMIC YEAR 2023/2024

### 1 - Establishment

The XXXIX cycle for doctoral programs, of a duration of three years, is hereby established at the University of Insubria. Access is regulated by a public selection call based on qualifications and exams.

Pursuant to the D.M. n. 226/2021, the PhD courses can be activated upon accreditation or verification of the maintenance of the accreditation requirements by the MUR. The winners will therefore be able to enroll only following the positive outcome of this verification.

For each Doctoral Program the attached table, which constitutes an integral part of this call, indicates: the available positions, the number of available scholarships, the qualifications requirements, the submission procedure and the schedule for the selection procedure.

The number of scholarships may be increased following from funding by public research institutions and highly qualified private production facilities, which may be made available after the publication of the call and by the date of completion of the selection procedure, without prejudice to the deadline provided for in article no. 3, paragraph 1, for the submission of applications. The increase in the number of scholarships will be notified to candidates through publication of a notice at <https://www.uninsubria.it/formazione/offerta-formativa/dottorati> and during the examination, before the conclusion of the procedure.

Only the scholarships whose funding has been guaranteed will be notified, according to the provisions of the previous paragraph.

Tests will follow the schedule indicated in the attachment to this call, which represents official notification to the interested parties. Candidates are expected to check for changes to the dates or times on the website <https://www.uninsubria.it/formazione/offerta-formativa/dottorati> or directly with the Office for phd and post-graduate training. Publication substitutes to all effects any personal communication.

The University, on the basis of the DM n. 118 of 2 March 2023, with funding from the European Union and from the Next Generation EU initiative, announces doctoral scholarships related to the action of Mission 4 component 1, Investment 3.4 of the PNRR. These scholarships will be awarded for projects with topics consistent with what is reported in the aforementioned decree and in particular "Assignment of new three-year doctorates in programs dedicated to digital and environmental transitions" (Investment 3.4).

The University, on the basis of the DM n. 117 of 2 March 2023, with funding from the European Union and from the Next Generation EU initiative, announces doctoral scholarships relating respectively to the actions of Mission 4 component 2 and relating to Investment 3.3 of the PNRR relating to innovative doctorates which they respond to the innovation needs of companies and promote the recruitment of researchers by companies. The related scholarships will be co-financed by companies and will include a period of study and research in the company and will be awarded for projects with topics consistent with what is reported in the aforementioned decree.





## 2 - ADMISSION REQUIREMENTS

Those who hold a Master's Degree or a 4-year Degree, following the system previous to the Ministerial Decree no. 509/1999, obtained in Italy, or equivalent academic title (Master's Degree) obtained abroad, may access the Doctoral Programs, without age or citizenship restrictions.

The abovementioned qualifications must be coherent with the chosen Doctoral Program.

Graduands may conditionally access the selection procedure, provided that they obtain the required admission qualification by 31 October 2023, under penalty of exclusion in case of positive outcome of the selection procedure.

Graduand candidates, if Italian or EU citizens, are expected to communicate the date and degree mark by e-mail at [scuola.dottorato@uninsubria.it](mailto:scuola.dottorato@uninsubria.it) attaching a self-certification by 4/11/2023.

The eligibility assessment of foreign qualifications falls on the Evaluating Committee of each Doctoral Program, in accordance with current regulations on the subject, both in Italy and in the country where the qualification itself was obtained, and with international treaties and agreements on the acknowledgment of qualifications in order to continue studying.

In such a case, participation in the selection will be with reservation and the candidate will have to submit, under penalty of exclusion, a self-certification pursuant to article no. 3 of the Decree of the President of the Republic no. 445/2000, before enrolling in the Doctoral Program.

Candidates with a foreign qualification which has already been declared equivalent to Italian qualifications that are eligible for admission in Doctoral Programs will have to attach the following documents:

- qualification and certificate from which the study plan may be inferred, which must be translated and certified by the Italian Representation (Embassy or Consulate) in the country where the qualification was obtained;
- Declaration of Equivalence by the Italian Representation (Embassy or Consulate) in the country where the qualification was obtained.

If the qualification was obtained at a European university, candidates may submit, as an alternative to the Declaration of Equivalence, the Diploma Supplement, certified by the competent authorities. Those who could not obtain the required documents in time, may be admitted with reservation. They are expected to submit the academic degree qualification, translated and certified, and the Declaration of Equivalence by the enrollment date.

The University reserves itself the right to request the Declaration of Equivalence, should there arise doubts on the validity of the qualification.

All candidates are admitted to the selection procedure with reservation.

The Administration may in any moment order, with motivated provision, the exclusion of a candidate for lack of prescribed requirements.

## 3 – ADMISSION APPLICATIONS

The deadline for submitting applications for admission to the competition is set, without fail, for 2 August 2023 h. 12:00 (Italian time).

It is possible to enroll in the competition simultaneously for ordinary positions as well as for those financed according to DM 117 and DM 118 and on research projects but for a maximum of two positions, also referring to different courses.



If a candidate is eligible for two scholarships, he will be placed in the respective rankings on the basis of the score achieved.

The Commission also reserves the right to assign a suitable candidate who has not been awarded a scholarship not indicated during the registration phase, provided that it is within the same course, taking into account the candidate's overall assessment. The choice for one of the assigned positions must be communicated to [scuola.dottorato@uninsubria.it](mailto:scuola.dottorato@uninsubria.it) before enrolment.

The winners of the scholarships referred to in the aforementioned DMs, under penalty of forfeiture of enrollment, undertake:

- to carry out the research periods foreseen in the company or institution and abroad as per the chosen project, and according to what is indicated in the DM 117 and DM 118 of 2 March 2023;
- to report on the activities carried out in accordance with the provisions of Ministerial Decrees 117 and Ministerial Decree 118 of 2 March 2023;
- to respect the principle of not causing significant damage to environmental objectives, pursuant to Article 17 of Regulation (EU) 2020/852 and ensure consistency with the PNRR positively evaluated with the Decision of the ECOFIN Council of 13 July 2021;

#### **Registration to the selection procedure**

Candidates will have to submit their application to the selection procedure following the electronic procedure available on the website of the University of Insubria ([www.uninsubria.it](http://www.uninsubria.it)) from any PC, **no later than 2 August 2023, 12.00 PM (Italian time zone).**

After the abovementioned deadline, the link will be disabled and it will not be possible to fill in the application and register to the selection procedure.

In order to access the electronic registration system (*test di ammissione* [admission test]) candidates will have to select from the website [www.uninsubria.it](http://www.uninsubria.it), the “Servizi Web – Segreteria Studenti” [Web Services - Students Support Service] entry.

Those who already hold a user ID and password may access the web services by clicking on “login” and selecting “*test di ammissione*” [admission test] and following the instructions.

Those who do not have access credentials must register by selecting “*Registrazione*” [Register], proceed to “login”, select “*test di ammissione*” [admission test] and follow the instructions.

When completing the application, candidates must:

- enter your personal data, study data, as well as the details of a valid identity document; the same document must be attached via upload and presented for recognition during the exam;
- choose the course and the foreign language, among those foreseen in the announcement for each doctoral course, the knowledge of which will be verified during the oral exam;
- indicate if you are interested in paid university accommodation. When registering for the competition, you are asked whether or not you are interested in the assignment of beds at the university colleges in Varese or Como.

Places are reserved, one for each PhD course activated in the 2023/2024 academic year, for students enrolled in the first year of the course. The assignees of the accommodation places will be identified by the teaching staff of each doctoral course on the basis of the addresses and guidelines issued by the doctoral school.

Doctoral students who will be assigned accommodation in the University Colleges will be required to profitably participate in the extra-curricular path prepared by the Scientific Committee of the "University with a collegial vocation" project.

The assignment of the place includes the right to maintain it for the entire duration of the study course provided that: a) the doctoral student achieves the right to transfer to the following year of



the course b) the doctoral student participates and profitably follows the "University with a vocation collegiate"

Further information on the Colleges and related fees are available at the following link: <https://www.uninsubria.it/servizi/alloggi-e-residenze-universitarie>

- if the attachment to this announcement provides that reference letters are included among the qualifications evaluated for admission to the chosen course, enter the name and e-mail address of the contact person(s) identified. Referents will receive further information on sending letters directly from the automated procedure;

- attach, via upload, the qualifications required in the file relating to each doctoral course (attached to this announcement) and the identity document whose details have already been entered;

- list of titles presented

- the admission fee to the competition is fixed at € 30.00 (thirty/00) and must be paid in a single solution using the payment notice attached to the online registration.

The qualifications and documents must be attached as PDF files and must not exceed 5 MB each. The file name must include the candidate's last name and the type of qualification (e.g. smith\_CV) max 25 characters.

Only the specific qualifications provided for in each Doctoral Program, as described in Attachment 1, will be considered by the Evaluating Committee.

Foreign and Italian candidates who hold an academic degree obtained abroad, besides the qualifications indicated at the end of the present call, will have to attach via upload:

1. The academic degree, translated and certified by the Italian Representation (Embassy or Consulate) in the country where the qualification was obtained;
2. The Declaration of Equivalence by the Italian Representation (Embassy or Consulate) in the country where the qualification was obtained.
3. A Diploma Supplement (as an alternative to the documents described in points 1 and 2 above, only for those who obtained the qualification at a European university).

Until the expiration date of the admission procedure provided for in the call, each candidate may:

- add, delete or modify the attached documents (qualifications and ID card) by clicking on "inserisci/modifica titoli valutabili" [enter/modify qualifications];
- add, delete or modify the name or email address of the identified contact person, should letters of recommendation be considered among the qualifications evaluated for admission to the chosen selection procedure (see Attachment 1), as well as solicit the added contact person to submit the letter.

The letters will be accepted in the online procedure until the expiration date of the admission procedure provided for in the call.

All changes will be definitively saved by the system only by concluding the application.

*Additions to the documents presented after the expiration date of the call will not be admitted.*

*Qualifications submitted following a different procedure from that indicated in the present call will not be considered by the Evaluating Committee.*

Failure to submit the qualifications will not invalidate the admission application to the selection procedure, except for Doctoral Programs which require a qualifications minimum score in order to be admitted to the oral/written test.

Candidates must also attach a file with a list of the submitted qualifications.



Candidates do not have to be present during the qualifications evaluation.

Please remember that entering false or wrong data (which are not corrected by the indicated deadline), will result in the exclusion from the test and/or final ranking list.

Should you experience problems while registering to the admission procedure, please contact the Research and Internationalization Office ([scuola.dottorato@uninsubria.it](mailto:scuola.dottorato@uninsubria.it)).

Failure to complete the application, following the abovementioned procedures, will entail inadmissibility to the selection procedure. The deadlines for the submission of admission applications to the selection procedure are peremptory.

Incomplete applications will be rejected. Applications received after the established deadlines will not be accepted.

By submitting the admission application for the test, candidates express their open acceptance of all regulations provided for in the present call.

Candidates are invited not to wait until the last days before the expiration date of the call in order to submit their admission application; the University is not liable for malfunctioning due to system overload.

When registering for the competition, you are asked whether or not you are interested in a university accommodation in Varese or Como.

Places are reserved, one for each PhD program activated in the academic year 2022/2023 to students enrolled in the first year of the course. The assignees of the accommodation places will be identified by the "Collegio Docenti" of each doctoral course on the basis of the addresses and guidelines issued by the doctoral school.

More information and costs at the link:

<https://www.uninsubria.eu/international-relations/servicesfacilities>

### **Ranking list**

After the registration deadline and appropriate checks, the list of candidates who, having submitted an application to the selection procedure and the qualifications according to the indicated procedures and within the prescribed limits, are admitted to take the test will be published at <https://www.uninsubria.it/formazione/offerta-formativa/dottorati>

### **Candidates with disabilities**

In order to arrange for all necessary aids, as well as determine additional time to carry out the test with regard to the specific handicaps (pursuant to article. no. 20 of the Law no. 104/92, integrated and modified by the Law no. 17/1999), candidates with disabilities must submit to the Research and Internationalization Office an adequate certification by the relevant Local Health Authority (ASL), by the deadline for the submission of applications.

Please note that the University offers a Service for Students with disabilities, Valleggio, in Como.

Both offices meet with students only on appointment. Further information at

<https://www.uninsubria.it/servizi/tutti-i-servizi/servizi-studenti-con-disabilita-co-dsa>



#### 4 – TESTS

Admission to Doctoral Programs is based on qualifications and exams. The Doctoral Program Committee will establish the suitable qualifications and the evaluation criteria of the same. The admission test consists in an evaluation of the candidates' qualifications, and in a written and/or oral test, which aims at verifying the preparation, abilities and predispositions of the candidates for scientific research. Admission tests for Doctoral Programs may be carried out in English if the candidate expressly requested so in the admission application. The oral or written test also includes a test of the foreign languages indicated by the candidates, which must nonetheless include English. Tests will follow the schedule which will be published on the University's website. Candidates are expected to check any changes in the dates, places or times on the website or directly with the Office for phd and post-graduate training. Publication substitutes to all effects any personal communication.

Candidates will have to show up for admission tests, under penalty of exclusion, with a valid ID card.

#### **Online interview**

Online interviews will take place by using the platform made available by the University (Microsoft Teams). To do so, candidates will have to provide an email account which the Evaluating Committee will use for the videocall.

Candidates will have to be available at their personal address, which they previously communicated, on the day indicated for the interview, following the schedule in the Doctoral Program presentation form. The Committee may agree upon a specific time for the interview. For the identification, candidates must identify themselves, under penalty of exclusion, by showing an ID card before the interview starts.

Candidates may be excluded from the selection procedure if they did not provide a personal email address (account), there is no internet connection, the connection test is not passed, they are not reachable on the indicated day or at the established time, or in case they do not display a valid ID card. The University of Insubria is not liable should technical issues impede to regularly carry out the interview.

Further information is available on the University's website at: <https://www.uninsubria.it/servizi/didattica-distanza>.

#### 5 - EVALUATING COMMITTEE

The Committee in charge of the comparative evaluation of the candidates will be appointed with Rectoral Decree and is composed of at least three members among the University's tenured professors and researchers (two of which should be full- or assistant professors), to which may be added, on the proposal of each Doctoral Program Committee, no more than two external experts, even foreign ones, chosen from highly qualified public and private research institutions and structures.

The composition of the Committee must abide by the principles of equal opportunity and gender balance, by allocating to women at least one third of all available positions.



In case of doctoral programs established following international inter-university cooperation agreements, the Committee and admission procedures are defined according to the provisions of the agreements themselves.

With regard to the verified qualities, the Committee assigns each candidate a maximum of 60 points for each test (qualifications evaluation and oral or written test). In case of different evaluation on the part of the Committee members, each of them assigns the candidate a maximum of  $60/n$ , where  $n$  stands for the number of Committee members. The oral or written test is public and is considered passed if candidates obtain a score not lower than 40/60. At the end of the selection procedure, the Committee establishes a general ranking list on the basis of the scores obtained by the candidates in the tests.

The test results will be disclosed through official publication on the University's website. Publication substitutes to all effects any personal communication.

The candidates who, according to the final ranking list, figure among those admitted to the course, forfeit their role if they do not notify in writing their acceptance by the deadline indicated in the ranking list. In such a case, the position will be offered to the first eligible candidate according to the ranking list.

If the Committee compiled a ranking list for each curriculum, candidates will be admitted to each curriculum for the number of positions available for their curriculum. If a smaller number of candidates is admitted to positions with scholarship of one curriculum, the remaining scholarships are appointed to the candidates who participated in the selection procedure for other curricula, according to their ranking lists.

## 6 – RANKING LISTS AND ENROLLMENT IN THE PROGRAMS

Candidates will be admitted to the programs according to the order of the ranking list for the number of positions available for each Doctoral Program or curriculum.

Candidates that have been effectively placed in the ranking list who do not enroll by the established deadline will be considered forfeiters. The competent offices will provide to update the ranking list, by officially notifying the interested parties.

The ranking lists will be published on the University's website (<https://www.uninsubria.it/formazione/offerta-formativa/dottorati>).

**Publication substitutes to all effects any personal communication.** Candidates are expected to check the ranking list, any change in the same and the peremptory limits for enrollment, in the notices published on the website.

Please refer to the enrollment procedure copied at the end of the ranking lists which will be published at: <https://www.uninsubria.it/formazione/offerta-formativa/dottorati>

Candidates who have been placed in more than one merit ranking list must choose one Doctoral Program only.

### Repechages

Any further subsequent scrolling in the ranking list will be communicated by direct notification to the candidates admitted to enrollment, by sending an email to the email address indicated when registering for the admission test.



Entitled candidates will be personally contacted via email, with a message sent to the email address indicated by each candidate when registering to the University's website. Only in this case will the enrollment admission notification be personal.

Entitled candidates who received the notification via email will have to apply for enrollment following the procedure described on the University's website, within the limits indicated in the text of the abovementioned notification.

In any case, the ranking lists and enrollment will close on 31 December 2023.

## **7 - INCOMPATIBILITY**

As regards the possible simultaneous enrollment in two higher education courses, please refer to the relevant university provisions. Any assessments of merit will be remitted to the Academic Board of the PhD course concerned, which will verify the compatibility of compulsory attendance with the existence of the conditions for acquiring the knowledge and skills necessary to achieve the educational objectives of each course.

The scholarship (law 398/1989) cannot be combined with other scholarships conferred for any reason except with those granted by national or foreign institutions useful for integrating training or research activities with stays abroad of fellows.

Anyone who has already benefited from a scholarship for a PhD course cannot benefit from it a second time.

## **8 – ATTENDANCE**

The beginning of doctoral programs coincides with that of the academic year.

Admission to a Doctoral Program entails an exclusive and full-time commitment. PhD students are expected to attend the activities provided for their educational curriculum on a regular basis and to totally dedicate themselves to the programs and to carrying out the assigned research activities. The Doctoral Program Committee regulates the attendance procedures for Doctoral Programs.

PhD students, as an integral part of the educational project, may carry out, prior to the approval of the Doctoral Program Committee and without any increase in the scholarship, some tutoring activities for the students of the Bachelor's and Master's degrees, as well as additional teaching activities, up to a maximum of forty hours per academic year.

PhD students are expected to follow the "Code of ethics, code of conduct and principles of research integrity of the university of Insubria", issued with Rectoral Decree Office no. 656/2020 and effective as of 16 October 2020.

The PhD qualification is obtained at the end of the Doctoral cycle, when passing the final examination, which is subject to the submission of a written dissertation (PhD thesis) that provides an account of an original research project that was carried out with methodological soundness and from which emerged results of an adequate scientific relevance.

The issue of the PhD certificate is subject to the submission by the candidates of the final thesis in the University's open access institutional repository, which will ensure its preservation and public consultation, in its entirety or in a partial manner, and even in the bibliographic data alone.





A B2 English language certificate constitutes a necessary requirement to obtain the PhD qualification (starting from PhD students of the XXXII cycle).

These must be attested by an officially recognized certifying body, in accordance with the provisions of the Common European Framework of Reference for Languages - CEFR.

For further information, please go to: <https://www.coe.int/en/web/common-european-framework-reference-languages/home>

## **9 – SCHOLARSHIPS**

Each Doctoral Program is equipped with scholarships to attend the program, which are assigned to the candidates following the order of the ranking list and for the number of available scholarships.

The scholarships have an annual duration and are renewed on the condition that the PhD student completed the program of the previous year, as verified according to the procedures established in the Regulations, without prejudice to the obligation to correspond the scholarship after having passed the verification.

The amount of the scholarship is increased by 50% for a total period no longer than 18 months, if the PhD student is authorized by the Doctoral Program Committee to carry out research activities abroad, for a period of no less than thirty days.

The annual amount of the scholarship is of 16,243.00 €. The Doctoral Program Scholarship is subject to the payment of social security contributions through the “gestione separata INPS”, in accordance with current regulations on the subject.

## **10 – ACCESS AND ATTENDANCE FEES**

All PhD students (both with and without scholarship) are expected to pay an annual fee of 156.00 €, in accordance with the provisions of the “Regulations on student fees for the academic year 2022/2023” available at [www.uninsubria.it](http://www.uninsubria.it).

With regard to any insurance charges in accordance with current regulations on the matter, please refer to the enrollment forms.

## **11 – PROCESSING OF PERSONAL DATA**

Pursuant to the legislative decree no. 196 of 30 June 2003 and following amendments and additions (“Personal data protection code”) and to the General Data Protection Regulation – EU Regulation no. 2016/679, the notice on the treatment of personal data is published on the University’s website at: <https://www.uninsubria.it/formazione/offerta-formativa/dottorati>

## **12 – NOTICE ON THE APPLICATION OF THE REGULATIONS FOR THE PREVENTION OF CORRUPTION**

The University, in implementing the regulations on the matter, has adopted its three-year Plan for the prevention of corruption and appointed a Committee for the Prevention of Corruption:

The three-year Plan is published on the institutional website at [www.uninsubria.it/amministrazione-trasparente/disposizioni-general](http://www.uninsubria.it/amministrazione-trasparente/disposizioni-general)



Reports may be sent to: [anticorruzione@uninsubria.it](mailto:anticorruzione@uninsubria.it)

### **13 – RECRUITMENT AND HRS4R**

The recruitment of PhD students (or Early Stage Researchers, following the European definition) will conform to the European Charter for Researchers (ECR) and the Code of Conduct for the Recruitment of Researchers (CCRR), which provide the general framework for the guidelines and requisites for the roles, responsibilities and rights of these positions, guaranteeing that selections procedures are open, transparent and meritocratic.

The University of Insubria received the European Quality Award “HRS4R - Human Resources Strategy for Researchers” in February 2019: such certification recognizes organizations their efforts to implement the Charter and Code in their policies and practice, and identifies the universities and institutions which create and promote a stimulating and encouraging research environment.

### **14 - ADMINISTRATIVE PROCEEDINGS**

Pursuant to Law no. 241 of 7 August 1990 and following amendments and additions, the person in charge for the administrative proceedings for the selection procedure is dr. Federico Raos, Doctoral and post-graduate training office. For information write an e-mail to: [scuola.dottorato@uninsubria.it](mailto:scuola.dottorato@uninsubria.it)

### **15 – REFERENCE REGULATIONS**

For any other matter not specifically covered by the present call, the University of Insubria abides by current regulations on the matter and by the University’s Regulations on Doctoral Programs. For information on selections procedures, please write to: [scuola.dottorato@uninsubria.it](mailto:scuola.dottorato@uninsubria.it)

Varese, 28.06.2023

The Rector  
Professor Angelo Tagliabue



**Attachment to the call for admission to the XXXIX cycle Research Doctorates -  
ORDINARY SCHOLARSHIP**

<b>LAW AND HUMANITIES</b>	
Scientific Area:	Law, Antiquities, Philology and Literature, History of Art; History, Philosophy, Pedagogy and Psychology; Geology; Biology.
PhD Director:	Prof. Giulio Facchetti – <a href="mailto:giulio.facchetti@uninsubria.it">giulio.facchetti@uninsubria.it</a>
Duration:	3 years
Department:	Department of Human Sciences, Territory and Innovation
Funded scholarships:	7
Non-funded scholarships:	2
Requirements:	Master’s Degrees in: Law, Cultural Anthropology and Ethnology, Archaeology, Landscape Architecture, Archive and Library Science, Architectural and Environmental heritage preservation, Cultural heritage preservation and restoration, Information and Publishing Systems, Modern European and American Languages and Literatures, Modern Languages for International communication and Cooperation, Linguistics, IT methodologies applied to Humanistic Disciplines, Territory and city planning, Design and Management of Tourism Systems, Design and Management of Educational Services, Psychology, International Relations, Cognitive Sciences, Political Sciences, Performing Arts and Media Production, Philosophical Sciences, Historical Sciences, Pedagogical Sciences, Welfare services and Policy, Sociology and Social Research, History of Art, Communication Theories, Criminology, Geography; Modern Philology; Philology, Ancient Literature and History; Musicology and Cultural Heritage.
Assessment type:	1- written test 2- evaluation of qualifications 3- oral exam The oral and written tests are face-to-face only and are considered passed if the candidate obtains a score of no less than 40/60 in each one.
Assessment Criteria:	Criteria for the assessment of qualifications, with a maximum overall score of 60 points. 1) Graduation score: Marks from 60 to 70: 1 point Marks from 71 to 80: 3 points Marks from 81 to 90: 5 points Marks from 91 to 98: 10 points Marks from 99 to 103: 14 points Marks from 104 to 107: 16 points Marks from 108 to 109: 18 points



	<p>Mark 110: 19 points Mark 110 cum laude: 20 points 2) Relevance of the Dissertation topic: from 0 to 5 points, keeping into account also the level of interdisciplinarity, interest and development potential of the subject matter. 3) Research activity: a. Scientific publications (papers published in scientific journals, chapters in volumes, or books with ISBN): from 0 to 10 points overall, in relation to the relevance to the doctorate’s subject matter, to the prestige and quality of the publications; b. Research activity: from 0 to 10 points, with particular reference to the award of fellowships, research grants, periods, collaborations. 4) Further education: from 0 to 5 points, overall, with special reference to refining courses, master courses, dissertation awards, as well as in regard to the relevance to the the doctorate’s topic and the prestige of the qualifications. 5) Teaching at the university level: from 0 to 10 points, overall, with particular regard to workshops, contracts, and to the role of “topic expert”, in relation to the quality and relevance to the doctorate’s subject matter. Interviews will be focused on determining the candidates’ educational background, evaluating research projects proposed by the candidates and assessing their knowledge of English and any other language they have indicated.</p>
Calendar:	Date, time and place will be made public at the following address: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">https://www.uninsubria.eu/opportunity/call-phd-xxxix</a>
Assessable Qualifications:	<p>Curriculum Vitae, including education, previous research experiences, thesis/dissertation title and publications.</p> <p>Self-certification or certification of the Master’s Degree transcript of records with dates, marks, type of title and final mark.</p> <p>For students waiting for the attainment of the Master’s Degree: self-certification or certification of the Master’s curriculum transcript of records with dates and marks.</p> <p>Abstract of the Master’s Degree Dissertation.</p> <p>Publications.</p> <p>Any other useful qualification such as: specialization and postgraduate courses, awards, grants, teaching activities, PhDs, collaboration in research activities.</p>



	<p>Recommendation letters (max. 3), by University professors or researchers. Such letters will be included directly by the evaluators into the on-line procedure. While filling out the online registration, applicants will have to enter the names and e-mail addresses of the identified referents.</p>
	<p>A numbered list of all the qualifications and documents supporting the application.</p>

<b>PHYSICS AND ASTROPHYSICS</b>	
Scientific Area:	Physics and Astrophysics
Curricula:	<p>1. Astrophysics 2. Physics</p> <p>Candidates are required to specify the Curriculum in the application form.</p>
Reference person:	Prof. Giuliano Benenti – giuliano.benenti@uninsubria.it – tel +39 031 238 6271
Duration:	3 years
Department:	Science and High Technology
Number of Scholarships:	<p>9, including:</p> <p>– 1 scholarship funded by <b>INAF “Istituto Nazionale di Astrofisica” – Osservatorio astronomico di Brera</b> on the project <i>“Study of the diffuse X-ray emission from the Galactic center region”</i>. The student will investigate, under the supervision of Dr. Gabriele Ponti, the various components of the X-ray diffuse emission from the Galactic center region. In particular, he/she will learn advanced analysis techniques of X-ray data, including a combination of spectra and images as well as spatially-resolved spectral analysis. This will allow the student to constrain the physical properties of the hot plasma at the center of the Milky Way;</p> <p>– 1 scholarship funded by <b>INAF “Istituto Nazionale di Astrofisica” – Istituto di Astrofisica Spaziale e Fisica Cosmica di Milano</b> on the project <i>“Surveying the galaxies growth and AGN impact: preparatory study and analysis of early data from MOONRISE”</i>. The selected candidate will work under the supervision of Dr. Bianca Garilli within the</p>



	<p>aforementioned project. The objective of the thesis project is to investigate the processes of star formation and stellar mass growth in galaxies, and to quantify the impact of active galactic nuclei on these processes. The study will make use of spectroscopic data obtained from the upcoming MOONRISE spectroscopic survey, which will dedicate 200 nights of observation to the VLT/MOONS infrared spectrograph. The first part of the work involves a preparatory study based on simulated MOONS spectra, aimed at optimizing the survey and the analysis techniques to be used on real data. The second part involves the application of these techniques to the data obtained in the initial stages of the survey's implementation.</p>
<p>Positions without scholarship:</p>	<p>2</p>
<p>Assessment of candidates:</p>	<p>The interview will consist of two parts, independently evaluated. The candidate will initially present and discuss his/her previous research activities. In the second part, his/her background knowledge will be assessed. Interviews can be hold in English.</p> <p><b>Only candidates who score at least 40 points in the evaluation of qualifications will be admitted to the interviews.</b></p> <p>Assessable qualifications:</p> <ul style="list-style-type: none"> <li>- Self certification or certification of the transcript of records the bachelor’s degree with date, type of title and final mark. Self-certification or certification of the transcript of records the master’s degree with date, type of title and final mark. For students awaiting receipt of master’s degree: self-certification or certification of the transcript of records of the master’s curriculum with dates and marks. (up to a maximum of 36 points)</li> <li>- Scientific publications related to the Doctorate. (up to a maximum of 4 points)</li> <li>- Teaching activity – tutorship, teaching assistance, seminars –. (up to a maximum of 4 points)</li> </ul>



	<p>- Additional training and awards – attended schools, internships abroad, scholarships, awards –. (up to a maximum of 4 points)</p> <p>- Relevance of the scientific profile to the themes of the Doctorate, as inferred by the curriculum vitae, the master’s thesis abstract, and the recommendation letters (no more than 3) from academics or researchers with whom the candidate has worked. The letter will be placed directly by the evaluators in the on-line procedure. Applicants will have to enter in the online registration form the name and e-mail address of the referent identified. The writers of the letters should provide information on their role in their institution, their connection with the applicant, an evaluation of the applicant’s past performance in comparison to students (with approximately the same amount of training and experience as the applicant) known during their professional career. The letters should highlight the major strengths and weaknesses of the applicant, with particular regard to his/her ability to pursue and successfully complete the PhD program. <b>The letters will be accepted in the online procedure until 25 August 2023 at 12:00 (Central European Summer Time).</b> (up to a maximum of 12 points)</p> <p>Candidates must submit and self-certify a list of all the qualifications.</p> <p>Each candidate must declare at the interview whether he/she intends to compete for the scholarship funded by INAF – Osservatorio Astronomico di Brera and/or for the scholarship funded by INAF - Istituto di Astrofisica Spaziale e Fisica Cosmica di Milano.</p>
Calendar:	<p><b>September 18-22, 2023</b> (The schedule will be announced with a subsequent notice on the University website: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">https://www.uninsubria.eu/opportunity/call-phd-xxxix</a>) The list of candidates admitted to the oral test will be published after September 1, 2023</p>



<b>COMPUTER SCIENCE AND MATHEMATICS OF COMPUTATION</b>	
Scientific field	01 - Mathematics and informatics; 09 - Industrial and information engineering; 13 – Economics and statistics
Academic disciplines	INF/01; ING-INF/05; MAT/01; MAT/03, MAT/05; MAT/07; MAT/08; SECS-S/01.
Coordinator	Professor Barbara Carminati – <a href="mailto:barbara.carminati@uninsubria.it">barbara.carminati@uninsubria.it</a>
Duration	3 years
Administrative headquarters department	Theoretical and Applied Sciences
Scholarships	7
Positions without scholarships	2
Evaluation criteria	<p>Up to a maximum of 60 points.</p> <p>Qualifications</p> <ul style="list-style-type: none"> <li>- exam marks and, if candidates have already discussed their thesis, final mark (up to a maximum of 20 points);</li> <li>- scientific significance, degree of originality and relevance of the research project and thesis (if it has already been discussed) to the themes of the Doctoral Program (up to a maximum of 15 points; for the evaluation of the thesis candidates must submit at least a detailed abstract of the thesis itself; they may also submit the full version of the thesis);</li> <li>- conference presentations and publications pertinent to the themes of the Doctoral Program (up to a maximum of 5 points);</li> <li>- training activities and professional experience pertinent to the themes of the Doctoral Program (up to a maximum of 5 points);</li> <li>- other qualifications, including language certifications and no more than 2 letters of recommendation (up to a maximum of 15 points).</li> </ul> <p><b>Only the candidates who have obtained at least 40 points in the qualification evaluations will be admitted to the oral test.</b></p>
Test type	The candidates who have obtained at least 40 points in the qualifications evaluation will be tested on their scientific interests, on the reasons which persuaded them to register for this specific Doctoral Program and on a description of their own research project or, as an alternative to the latter, on an analysis of a research field which is pertinent to the specific themes of the Doctoral Program. Knowledge of the English language will also be assessed.





	The admission test may be taken in English upon the candidate's request.
Test schedule	The date of the interview will be communicated with a notice on the website at: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">https://www.uninsubria.eu/opportunity/call-phd-xxxix</a>
Qualifications	<p>CV with personal data, education (with courses length and marks), previous research experiences, theses and publications Candidates are required to present their Curriculum Vitae in .pdf format by using the appropriate template to be downloaded from this link: <a href="https://archivio.uninsubria.it/files/cvtemplate2023mmeddocx">https://archivio.uninsubria.it/files/cvtemplate2023mmeddocx</a></p> <p>Self-certification, which must be dated and signed, of the academic degree (4-year, second degree or Master's degree), with the list of exams and relative marks, the University which issued the qualification, the attainment date and final mark</p> <p>Self-certification, which must be dated and signed, of the Bachelor's Degree qualification, with date, final mark and list of exams with relative marks</p> <p>For graduands: Self-certification, which must be dated and signed, of the exams and relative marks. Please indicate the expected date for the final exam</p> <p>Thesis or detailed abstract of the same (in electronic format) (4-year degree, second degree or Master's degree)</p> <p>Research project pertinent to the themes of the Doctoral Program</p> <p>Publications (including conference presentations)</p> <p>Specialization courses, doctoral programs, training courses, master courses, awards, scholarships; research grants and scholarships, teaching activities already carried out (seminars, contracts, honorary fellowships), and collaborations for research activities</p> <p>Letters of recommendation (up to three) written by academic professors or researchers with whom the candidate worked (these will be directly submitted by the evaluators in the online procedure, the candidates will have to enter the name and email address of the identified contact person while registering online to the selection procedure)</p> <p>Other qualifications which candidates deem useful for the evaluation</p>

<b>CLINICAL AND EXPERIMENTAL MEDICINE AND MEDICAL HUMANITIES</b>	
Scientific field	05 – Biology; 06 Medicine; 14 – Political and social sciences



Academic disciplines	BIO/09; BIO/11; BIO/13; BIO/14; M-FIL/02; M-FIL/03; MED/02; MED/04; MED/09; MED/10; MED/11; MED/15; MED/17; MED/25; MED/26; MED/39; MED/41; MED/43; MED/44; SPS/01.
Coordinator	Professor Marco Cosentino – <a href="mailto:marco.cosentino@uninsubria.it">marco.cosentino@uninsubria.it</a>
Duration	3 years
Administrative headquarters department	Medicine and Surgery
Scholarships	7
Positions without scholarships	3
Admission requirements	All candidates who hold a Master’s Degree, specifically in one of the following fields, may access the Doctoral Program: medicine and surgery, dentistry and orthodontics, veterinary medicine, literature and philosophy, communication, biology, biotechnology, pharmacy, psychology, chemistry and pharmaceutical biotechnologies, and law and economics. An adequate cultural education and suitable personal journey to undertake the Doctoral Program will be specifically assessed and evaluated during the admission test.
Test type	The assessment will be focused on a written research project and an interview to discuss the submitted project with particular attention to: <ul style="list-style-type: none"> <li>• the relevance of the project for the PhD course topics</li> <li>• its feasibility in relation to the 3-y PhD course duration</li> <li>• its originality</li> <li>• its clarity.</li> </ul> Candidates will be given one hour to draw the project, During the interview, knowledge of the English language will be also assessed.
Evaluation criteria	<u>Qualifications evaluation criteria</u> - 10 points for the degree final mark; - 10 points for other academic qualifications; - 15 points for the relevance of the thesis; - 15 points for publications which are pertinent to the themes of the program; - 10 points for other qualifications which are pertinent to the themes of the program. The qualifications must be supplied with (under penalty of exclusion) a list of the qualifications.
Test schedule	Written research project: 20 september 2023, 2PM Interview: 22 september 2023, 9AM



	The venues of the test will be communicated with a notice on the website at: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">https://www.uninsubria.eu/opportunity/call-phd-xxxix</a>
Qualifications	Self-certification, which must be dated and signed, of the academic degree (4-year, second degree or Master's degree), the University which issued the qualification, the attainment date and final mark
	Self-certification, which must be dated and signed, of any other academic qualifications with date and final mark
	For graduands: Self-certification, which must be dated and signed, with the expected date of the final exam
	Thesis (in electronic format) (4-year degree, second degree or Master's degree). Please attach the full version, without this the thesis will not be evaluated.
	Any publications (including conference presentations). Please attach the full version, without this the publication will not be evaluated.
	Specialization courses, doctoral programs, training courses, master courses, awards, scholarships; research grants and scholarships, teaching activities already carried out (seminars, contracts, honorary fellowships), and collaborations for research activities;
	A numbered list of all submitted qualifications
Important: only the qualifications listed in the list will be evaluated. Lack of the list will result in exclusion from the contest.	

<b>EXPERIMENTAL AND TRANSLATIONAL MEDICINE</b>	
Scientific field:	Medicine; Biology; Biomedicine
Referent:	Prof. Mauro Fasano <a href="mailto:mauro.fasano@uninsubria.it">mauro.fasano@uninsubria.it</a>
Duration:	3 years
Department:	Science and High Technology
Scholarships:	7
Requirements:	Master's Degree in Medicine and Surgery; Biology; Biotechnologies; Pharmacy; Chemistry and Pharmaceutical Technologies, Chemistry, Dentistry; Movement Science, Physics



<p>Assessment: Interview:</p>	<p>Candidates obtaining at least 30/60 in the evaluation of qualifications will be admitted to the interview.</p> <p>Candidates will be interviewed in relation to their scientific interests and their motivation to enroll in this PhD program. Candidates will be asked to express their preference <b>with priority order</b> on two research projects chosen among those proposed by the Doctorate Committee.</p> <p>The cultural background will be assessed with particular reference to issues related to the research project to which the Candidate is interested, the ability to discuss the most relevant discoveries in the related scientific field, methodological and research skills in both the laboratory and clinical settings, personal motivation to research in Translational Medicine, proficiency in scientific English. Foreign candidates will be interviewed in English.</p> <p>The interviews will take place <b>in person</b>, unless specifically authorized by the examining Commission after written request by the Candidate.</p>
<p>Commitment of PhD students</p>	<p>Full time research activity</p>
<p>Research projects (candidates must contact Principal Investigators for details of the scientific project in which they are interested):</p>	<p>Long-term impact of adolescent delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD) exposure on adolescent brain remodeling. PI: Erica Zamberletti, <a href="mailto:erica.zamberletti@uninsubria.it">erica.zamberletti@uninsubria.it</a></p> <p>Role of human milk oligosaccharide, 2'-fucosyllactose and Lactobacillus Rhamnosus GG (ATCC 53103) on the Microbiota-Gut-Brain Axis in Early Life. PI: Cristina Giaroni, <a href="mailto:cristina.giaroni@uninsubria.it">cristina.giaroni@uninsubria.it</a></p> <p>Applied salivomics in early diagnosis of malignancy. Proteomic analysis for the detection of salivary biomarkers suitable for a mass screening program. PI: Lorenzo Azzi, <a href="mailto:l.azzi@uninsubria.it">l.azzi@uninsubria.it</a></p> <p>Comprehensive Pan-Cancer analysis reveals epigenetic molecular mechanisms involved in better prognostic outcomes due to high UHRF1 expression in Colorectal, Gastric and Thymoma cancers - Role of the protein in DNA methylation, chromatin reorganization, and gene expression regulation of EMT and Cancer Stem Cell genes in those tumors. PI: Ian Marc Bonapace, <a href="mailto:ian.bonapace@uninsubria.it">ian.bonapace@uninsubria.it</a></p> <p>Development of an AI-based platform for rational design of small molecules to orchestrate key protein-protein interaction for innovative applications in biomedicine. PI: Mauro Fasano, <a href="mailto:mauro.fasano@uninsubria.it">mauro.fasano@uninsubria.it</a></p> <p>Modulating the Neurotransmitter Transporters: A Potential</p>



	<p>Approach for Enhancing Brain Health. PI: Elena Bossi, Cristina Roseti, <a href="mailto:elena.bossi@uninsubria.it">elena.bossi@uninsubria.it</a>, <a href="mailto:cristina.roseti@uninsubria.it">cristina.roseti@uninsubria.it</a></p> <p>Novel anti-glioblastoma therapeutic vaccines based on optimal activation of tumor-specific CD4+ T helper cells. PI: Greta Forlani, <a href="mailto:greta.forlani@uninsubria.it">greta.forlani@uninsubria.it</a></p> <p>Characterization of the role of CDKL5 at the postsynaptic site of inhibitory synapses. PI: Charlotte Kilstrup-Nielsen, <a href="mailto:c.kilstrup-nielsen@uninsubria.it">c.kilstrup-nielsen@uninsubria.it</a></p> <p>Local and systemic microbiota influence on innate antiviral response. PI: Andreina Baj, <a href="mailto:andreina.baj@uninsubria.it">andreina.baj@uninsubria.it</a></p> <p>Development of an antimicrobial stewardship program in surgical units. PI: Paolo Antonio Grossi, <a href="mailto:paolo.grossi@uninsubria.it">paolo.grossi@uninsubria.it</a></p> <p>Patient-specific genomic biomarkers to monitor the minimal residual disease in chronic myeloid leukemia. PI: Giovanni Porta, <a href="mailto:giovanni.porta@uninsubria.it">giovanni.porta@uninsubria.it</a></p> <p>Phenotype and functional characterization of tumor-associated and tumor-infiltrating natural killer cells in renal cancer patients. PI: Lorenzo Mortara, <a href="mailto:lorenzo.mortara@uninsubria.it">lorenzo.mortara@uninsubria.it</a></p>
Calendar:	05 September 2023 (Qualification) – 12 September 2023 (interview), in Varese
Assessable Qualifications:	<p>Curriculum vitae presented using <b>exclusively</b> the proposed format (see attached template)</p> <p>Signed self-certification or certification of the transcript of records of the Master’s Degree with dates, marks, type of title and final mark.</p> <p>Signed self-certification or certification of the transcript of records the Bachelor’s Degree with date, type of title and final mark.</p> <p>For Students still awaiting the attainment of the MD degree or Master Diploma: signed self certification or certification of the transcript of records of the University course/Master’s curriculum with dates and marks</p> <p>Electronic version of the thesis for the MD or MSc degree</p> <p>Publications (or manuscripts accepted for publication) and congress abstracts</p>



	Other useful qualification such: specialization and postgraduate courses, awards, grants, didactic activities, collaboration to research activities.
	Recommendation Letters (Max. 3), by University teachers or researchers. The letter will be placed directly by the evaluators in the on-line procedure. Applicants will have to enter in the online registration form the name and e-mail address of the referent identified
	Any other qualification that the Candidate considers of relevance for the evaluation

<b>METHODS AND MODELS FOR ECONOMIC DECISIONS</b>	
Scientific field	13 - Economics and statistics
Academic disciplines	SECS-P01, SECS-P02, SECS-P03, SECS-P04, SECS-P05, SECS-P06, SECS-P07, SECS-P08, SECS-P12; SECS-S03, SECS-S06.
Coordinator	Prof. Andrea Vezzulli <a href="mailto:andrea.vezzulli@uninsubria.it">andrea.vezzulli@uninsubria.it</a>
Duration	3 years
Administrative headquarters department	Economics
Scholarships	6
Positions without scholarships	0
Evaluation criteria and qualifications	<p>Assessable qualifications; up to <u>60 points</u>:</p> <ul style="list-style-type: none"> <li>– graduation final mark (up to 15 points; for graduands the final mark will be estimated with the arithmetic average mark of the exams);</li> <li>– scientific significance, degree of originality and relevance of the research project and thesis (up to 25 points; the applicant must submit an abstract of the thesis or its integral version);</li> <li>– publications and conference presentations on topics relevant for the PhD program (up to 5 points);</li> <li>– training activities and professional experience relevant for the PhD (up to 5 points);</li> <li>– any other assessable qualifications, including language certifications, and up to 3 recommendation letters (up to 10 points).</li> </ul> <p><b>Only applicants awarded with a minimum of 40 points on the qualification assessment are admitted to the interview.</b></p>
Test type:	<p><b><u>Only applicants who have obtained at least 40 points in the qualification assessment are admitted to the interview.</u></b></p> <p>Applicants are interviewed on their scientific interests and their motivations for applying to this specific PhD program.</p>



	The interview can be evaluated <u>up to a maximum of 60 points</u> , and is considered as passed only if the applicant obtains at least 40 points. The interview, which is public, tests the basic knowledge of economics and quantitative topics, as well as the knowledge of English, and could involve a discussion of possible research lines related to the PhD. Applicants may perform the interview in English or Italian. If the interview will be performed in Italian, there will be, in any case, an assessment of the candidate's English proficiency.
Test schedule	Time and place for the test will be communicated with a notice on the website at: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">https://www.uninsubria.eu/opportunity/call-phd-xxxix</a> .
Assessable documents (to be uploaded as attachments to the application form)	CV with personal data, education (with courses duration and marks), previous research experiences, theses, and publications. Candidates are required to present their Curriculum Vitae in .pdf format by using the proposed template <a href="https://archivio.uninsubria.it/files/cvtemplate2023mmeddocx">https://archivio.uninsubria.it/files/cvtemplate2023mmeddocx</a>
	Certificate or self-certification, which must be dated and signed, of the academic degree (4-year, second degree or Master's degree), with the list of exams and relative marks, the University which issued the qualification, the attainment date and final mark.
	For graduands: Certificate or self-certification, which must be dated and signed, of the exams and relative marks. Please indicate the expected date for the final exam.
	Thesis or detailed abstract of the same (in electronic format) (4-year degree, second degree or Master's degree).
	Certificate or self-certification, which must be dated and signed, of the Bachelor's Degree qualification, with date, final mark and list of exams with relative marks.
	Research project pertinent to the themes of the Doctoral Program.
	Publications (including conference presentations).
	Specialization courses, doctoral programs, training courses, master courses, awards, scholarships; research grants and scholarships, teaching activities already carried out (seminars, contracts, honorary fellowships), and collaborations for research activities.
	Letters of recommendation (up to three) written by academic professors or researchers. The letters of recommendation will be directly sent by the contact person via the online procedure: candidates will have to enter the name and email address of the identified contact person while registering online to the selection procedure. It is recommended to start this procedure in good time before the deadline for the submission of applications.
Any other documents that can be evaluated.	



CHEMICAL AND ENVIRONMENTAL SCIENCES	
Scientific field:	Chemistry; Earth Sciences; Biology; Medicine; Environmental Engineering; Industrial Engineering
Curricula:	1. Chemical Sciences 2. Environmental Sciences Further information can be found at: <a href="https://dottorato.disca.uninsubria.it/">https://dottorato.disca.uninsubria.it/</a>
Referent:	Prof. Alessandro Maria Michetti - <a href="mailto:alessandro.michetti@uninsubria.it">alessandro.michetti@uninsubria.it</a>
Duration:	3 years
Department:	Science and High Technology
Scholarships:	7 3 CV Environmental Sciences 4 CV Chemical Sciences
Places without scholarship:	2
Requirements:	Any Master's Degree (second or single cycle)
Assessment criteria and assessable qualifications:	Up to a maximum of 60 points for the qualification assessment. Assessable qualifications: - graduation grade and full list of exams, including the marks obtained in the different examinations/activities; the average grade obtained during the degree will be considered; - relevance of the degree to the subjects of the PhD program; submission of the dissertation title and abstract is mandatory; - publications relevant to the subjects of the PhD program; - further qualifications: presentations to congresses, participations to schools, job activities relevant to the subjects of the PhD program, further degrees, awards. <b>Applicants receiving at least 25 points for the qualification assessment will be admitted to the interview.</b>





<p>Assessment: Interview</p>	<p>Candidates will be interviewed in person. The interview will consider their scientific interests, the motivations leading them to apply to this PhD program, the definition of an ideal research project, indicating goals, methodologies, procedures and scheduling. A sound cultural background will be assessed, with particular reference to the topics of the PhD program, the ability to discuss the most important discoveries of the last decades in the chemical and environmental fields, the methodological and research competencies (e.g. modelling, lab activities, field activities), the knowledge of English and additional EU languages.</p> <p>The candidate may perform the interview in English language.</p> <p>Further information can be found in: <a href="https://dottorato.disca.uninsubria.it/home-english-version/">https://dottorato.disca.uninsubria.it/home-english-version/</a></p>
<p>Calendar:</p>	<p>The list of candidates admitted to the interview will be posted at the following address: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">https://www.uninsubria.eu/opportunity/call-phd-xxxix</a></p> <p>The interviews will take place in Via Valleggio 11, Como, on a <b>date between 4 and 5 September 2023, for the Chemical Sciences CV; and on a date between 14 and 15 September 2023, for the Environmental Sciences CV.</b> Upon motivated request of the candidate, it will be possible to carry out the interview on the Teams</p>
<p>Assessable Qualifications:</p>	<p>Complete Curriculum Vitae, including education data, previous research experiences, thesis and publications.</p> <p><b>NOTE: Candidates are required to submit their Curriculum Vitae in pdf format using the appropriate template that can be filled in and downloaded at the following link:</b> <a href="https://archivio.uninsubria.it/sites/default/files/Didattica/PostL/Dottorati/CV_scienze%20chimiche%20e%20ambientali.docx">https://archivio.uninsubria.it/sites/default/files/Didattica/PostL/Dottorati/CV_scienze%20chimiche%20e%20ambientali.docx</a></p> <p>Self-certification or certification of the transcript of records of the Master's Degree with dates, marks, type of title and final mark.</p> <p>For Students awaiting receipt of Master's Degree: Self certification or certification of the transcript of records of the Master's curriculum with dates and marks</p> <p>Self-certification or certification of the transcript of records the Bachelor's Degree with date, type of title and final mark</p> <p>Abstract of the Master Thesis</p> <p>Publications</p>



	Any other useful qualification such as: specialization and postgraduate courses, awards, grants, teaching activities, PhD titles, collaboration to research programs.
--	---

<b>LIFE SCIENCES AND BIOTECHNOLOGY</b>	
Scientific Area:	Chemical Sciences; Biology; Medicine
Referent:	Prof.ssa Silvia Sacchi – <a href="mailto:silvia.sacchi@uninsubria.it">silvia.sacchi@uninsubria.it</a>
Duration:	3 Years
Department:	Biotechnology and Life Sciences
Scholarships:	7
Places without scholarship:	2
Requirements:	All master degree graduates (graduate degrees, single-cycle graduate degrees or other qualification obtained abroad and recognized as equivalent) can access the PhD course, especially graduates in: Biotechnology, Medicine and Surgery, Dentistry, Veterinary Medicine, Communication Sciences and Techniques, Life sciences, Pharmacy, Psychology, Chemistry and pharmaceutical technologies, Physical sciences, Environmental sciences, Engineering, Agricultural science and technology, Food preparation sciences, Sciences and animal husbandry technologies, Natural sciences, Sciences of technical health professions.
Assessment criteria:	<p><b>60 points</b> for the qualifications assessment divided as follows:</p> <ul style="list-style-type: none"> <li>up to <b>30 points</b> for the graduation grade (or the average grade of all exams for undergraduates);</li> <li>up to <b>15 points</b> for the relevance of the thesis to the research topics covered by the PhD course;</li> <li>up to <b>10 points</b> for the curriculum and other assessable qualifications;</li> <li>up to <b>5 points</b> for publications and presentations at conferences;</li> </ul> <p>Only candidates who obtain at least <b>36 points</b> in the evaluation of qualifications will be admitted to the final interview.</p> <p><b>60 points</b> for the interview (included <b>10 points</b> for language skills).</p>



<p>Assessment: Interview</p>	<p>The interview will focus on the scientific interests and the motivation of candidates. They will be asked to present their proposal for the development of one of the available research projects. Candidates will illustrate purposes, methodologies, timing for implementation, and any critical issues. During the interview, the following aspects will be assessed: a sound scientific background related to the PhD course topics; methodological, research and lab skills; the knowledge of English language (and other linguistic skills). The candidate may perform the competition in English language.</p>
<p>Research projects</p>	<p>The projects available for XXXIX cycle are the following:</p> <ol style="list-style-type: none"> <li>1. Prof. Gornati "The medicinal leech <i>Hirudo verbana</i> as innovative model to study Mesenchymal Stem Cell potential for biomedical applications";</li> <li>2. Prof. Vigetti, Prof. Viola "Molecular mechanisms of modification of the extracellular matrix in breast cancer"</li> <li>3. Prof. Tettamanti Gianluca "Bioconversion capabilities of black soldier fly and effects of the feeding substrate on the larval performance"</li> <li>4. Prof. Bernardini "The effects of diet on the intestinal microbiota of fish "</li> <li>5. Prof. Marinelli "Tackling antibiotic resistance: novel polypeptides and poliketides produced by actinobacteria"</li> <li>6. Prof Pollegioni "Studying the human serinosome: the effect of mutations related to pathological states"</li> <li>7. Prof. Raspanti "Ultrastructural aspects of bone remodeling"</li> <li>8. Dott. Rosini "Antimicrobial peptides for the functionalization of silk fibroin: a new strategy to boost the efficacy of conventional antimicrobial resistance orthopedic infections"</li> <li>9. Dott. Bruno "Study of the molecular crosstalk between immune and cardiovascular cells in atherosclerosis"</li> </ol>



Calendar:	The interviews will take place on 11, 14 and if required by the number of candidates, 15 September 2023 at 10 am, in presence, with the possibility for foreign candidates (or those who are abroad) to request the remote connection.
Assessable Qualifications:	Curriculum vitae must be presented using the appropriate form which can be downloaded at the following link: <a href="https://www.uninsubria.it/files/cvtemplate2021.docx">https://www.uninsubria.it/files/cvtemplate2021.docx</a> Please note: <b>if submitted in any other form, the title will not be evaluated.</b> The Curriculum vitae must be complete with: i) personal data; ii) training path with the duration of the courses and the grades obtained; iii) previous research experiences, theses and publications produced.
	Self-certification or certification of the transcript of records of the Master's Degree with dates, marks, type of title, evaluation and final mark.
	Self-certification or certification of the transcript of records the Bachelor's Degree with date, type of title and final mark.
	For Students awaiting the attainment of the Master's Degree: self-certification or certification of the transcript of records of the Master's curriculum with dates and marks.
	Abstract of the Master Thesis
	Publications
	Any other useful qualification such as: specialization and postgraduate courses, awards, grants, teaching activities, PhD titles, collaboration to research activities, that can be certified.



Attachment to the call for admission to the XXXIX cycle Research Doctorates - ADDITIONAL SCHOLARSHIP

LAW AND HUMANITIES	
Scientific Area:	Law, Antiquities, Philology and Literature, History of Art; History, Philosophy, Pedagogy and Psychology; Geology; Biology.
PhD Director:	Prof. Giulio Facchetti – giulio.facchetti@uninsubria.it
Duration:	3 years
Department:	Department of Human Sciences, Territory and Innovation
Borse di studio	7 <b>1- Project title: JUDICIAL DATA AND "PERFORMANCE" OF THE CRIMINAL PROCESS</b> <u>Project description:</u> Within the objectives set by the National Recovery and Resilience Plan, the improvement of the functioning of the "justice system" has always been strategic, in the light to attract foreign economic resources, often discouraged by the length of Italian proceedings. The modernization of judicial procedures, both civil and criminal, goes through not only the modification of the procedural rules, but also the increase and rationalization of resources, as well as digitalization. The creation of the "Office for the Process" demonstrates the awareness of the legislator and the Government on the point, within the framework of the "PON Governance and Institutional Capacity 2014-2020". University research on these issues has been a driving force and must continue to be so, even though the synergy with the institutional actors (judicial offices and Ministry) obviously appears to be essential. The road to implement and consolidate the results obtained so far is still very long and



requires a radical change of vision, especially in the “processing” of judicial data.

Within the term “processing”, in fact, it is necessary to include not only the formation and conservation of judicial data, but above all its subsequent - and dutiful - use for statistical and research purposes: a method of use with extraordinary predictive capabilities but still scarcely widespread in Italy . The use of data for statistical purposes can serve not only the legislator to measure the impact of a law (even preventively, to decide whether to introduce it or not), but also the citizen, in whose name justice is administered, to evaluate, on a local basis, the performance of the judicial offices and, on a national basis, of the entire judicial machinery, on the basis of appropriate searches (“queries”) in institutional databases, currently still poorly accessible.

In this frame, the present work should support research in the field of judicial statistics, with the ambitious aim of increasing the "data culture" in the mentality of the jurist.

**2- Project title: SUSTAINABLE DEVELOPMENT OF ITALIAN TOURISM: POLICIES, PRACTICES AND PERCEPTIONS**

Project description: The project must be articulated mainly on two levels: the first level deepens an interdisciplinary perspective and calls together the foundations of economic-political geography, environmental economics and political ecology. This part of the project calls for in-depth work on environmental certification in the Italian tourism sector, also through the analysis of the European transaction of the new directive currently being negotiated. Along the red thread of sustainable tourism, in its contemporary declination of Just Tourism, it will be necessary to investigate life cycle assessment and the circular economy of the Italian tourism sector.

The second research plan is methodologically more detailed and requires the researcher to critically explore the narratives and perceptions



regarding the sustainable development of a tourist destination. Narratives and perceptions will be analysed through semantic analysis and sentiment analysis. It will be necessary to collect data on tourists' online conversations in specific areas (geolocation) or during specific events. This will make it possible to identify and understand the perception of sustainability on the web as a further level of analysis of sustainable tourism. In this way, it will be possible to move from tourism sustainability through policies to perceived tourism sustainability.

These analyses will provide a tourism destination with important indications on the policy orientation towards sustainability and the most appropriate strategies for the future development and communication of the tourism destinations that will be selected as case studies, among those included in the PNRR-NODES area.

**3- Project title: CULTURE, LEGALITY AND CIVIC EDUCATION IN THE BORDER TERRITORY BETWEEN INSUBRIA AND CANTON TICINO.**

Project description: Material and immaterial culture represents a fundamental element for the growth of the individual, for his improvement, for the construction of a society capable of facing the challenges of the present and the future on the basis of shared founding and indispensable values. This is also the lesson that our Constitutional Charter at the highest level teaches and reiterates, inviting the construction, in the educational field, of civic education paths based on the knowledge of cultural heritage, their meanings and values. In this perspective, the provision among the pillars of the "new" civic education of the Constitution, Law, Legality, knowledge of cultural heritage and territory is decisive. The PhD student will deepen these issues through constant collaboration with the Provincial School Office of Varese, through the construction of ad hoc paths, contacts with secondary schools, continuous training of teaching staff. The guidelines for this work will be established in collaboration with the USP and a



tutor also within the institution. This collaboration will take the form of constant work at the same headquarters of the School Office, according to a calendar established by the tutors.

**4- Project title: ENHANCEMENT OF THE MUSEUMS OF THE PROVINCE OF VARESE AND OF THE CULTURAL HERITAGE**

Project description: The Varese territory still needs research actions on museums and exhibitions which up to now have only been subject to valorisation to a limited extent.

The project involves the areas of historical research and communication of the assets under investigation, their context of belonging and comparison with neighboring and historically connected realities (Switzerland, Canton Ticino, area where the study period is envisaged at 'abroad), also with the aim of enhancing development plans for local tourism.

**5- Project title: DEFENSIVE BUREAUCRACY AND ACCOUNTABILITY OF PUBLIC OFFICIALS IN CONTRACTUAL MATTERS.**

Project description: The research project intends to investigate the mechanisms which, on the whole, lead to the activation of phenomena commonly known as "defensive bureaucracy" or "fear of the signature" which concern, in general, the public administration and which particularly affect the public procurement sector .

The stimulus to research lies in the observation of the numerous legislative interventions which, especially in recent years, have concerned these phenomena, with the aim - more or less explicitly stated - of directing the behavior of officials, with methods and tools that have seemed, however, often insufficient and which have produced results, in the best cases, rather modest, also due to a sometimes rudimentary and insufficient use of accountability mechanisms, on the one hand, and of bonus/incentive systems, on the other.





The exclusively juridical/normative approach adopted with respect to problems of the kind under examination has in fact resulted and is, in concrete terms, indispensable but in itself insufficient to grasp all the deeper implications of mechanisms strongly dependent on human, psychological and social factors which condition the behavior of public officials.

The objective of the research should therefore be the identification, in a multidisciplinary key, of the factors that contribute to determining phenomena of "defensive bureaucracy", with the ultimate aim of identifying the causes and identifying the most suitable legal instruments to remedy them.

The importance of reflecting on the topic proposed here clearly emerges from the premises of the PNRR, according to which the delays accumulated by Italy compared to the average of other European countries "are partly linked to the decline in public and private investments, which has slowed down the necessary modernization processes of the public administration, infrastructures and production chains".

In the context described, the reform of the public administration is considered crucial (point 2A of the PNRR) because "the weak administrative capacity of the Italian public sector has represented an obstacle to the improvement of the services offered and to public investments in recent years. The PNRR addresses this rigidity and promotes an ambitious reform agenda for the Public Administration."

To this end, "The simplification of the rules on public procurement and concessions is an essential objective for the efficient construction of infrastructures and for the relaunch of building activity: both essential aspects for the recovery following the spread of the Covid-19 infection 19".

The circumstance that the calibrated use of liability instruments is one of the determining factors for making the public procurement sector more efficient clearly emerges from the methods of implementation of this objective mentioned in



the PNRR, which include precisely the "Limitation of liability for tax damage to cases in which the production of the damage is willfully willed by the person who acted, with the exception of damage caused by omission or inaction".

The study of the topics proposed here therefore proves to be crucial for the purpose of overcoming some of the critical issues afflicting the public procurement sector.

**6- Project title: STRATEGIES AND TOOLS FOR THE SUSTAINABLE, RESILIENT, INCLUSIVE PUBLIC CITY**

Project description: The climate-environmental and energy crisis and, even earlier, the pandemic have re-proposed, in unavoidable terms, the theme of the infrastructural, service and environmental endowments of the territory which constitute the backbone of the 'public city'. A theme that, beyond the emergencies, directly concerns the quality levels, the wholesomeness and inclusiveness of the places of life. A theme that would be reductive to limit the need for 'technical' corrections to the Ministerial Decree 1444/1968 (as was done - to give just one example - with the introduction of article 2-bis of Presidential Decree 380/2001).

The environmental crisis brought about by climate change, the effects of which are accentuated in urban contexts, requires the clipping of not simple unsealing aimed at mitigating the 'heat bubble' effect and aimed at guaranteeing the drainage of rainwater (always in suggestive terms yes talk about 'sponge city').

Furthermore, it is necessary to move from an energy-intensive city panorama to a sustainable and resilient settlement model and to do this it is necessary to intervene not only on the 'passivity' and reflectance of the buildings (according to the incentive scheme which has informed the bonus season and how it seems to outline the draft directive under discussion). We need policies for collective transport systems and large-scale



projects for public green areas (urban and connection with agro-natural areas).

The post-pandemic season, in addition to bringing out the need to rethink housing cuts (houses have also structurally become places of work and study), has forced us to return to reflect on the profile of the proximity of supply platforms and green spaces with respect to places of greatest population density (often coinciding with the old and new urban suburbs). In this direction, a model of reallocation of territorial endowments has been prefigured according to a locational scheme imaginatively defined as 'city in a quarter of an hour' (actually tested in some European cities) which definitively detaches itself from the parametric logic of sizing legacy of the twentieth-century rationalist paradigm.

Above all, it is the discipline of standards (Ministerial Decree 1444/1968 and the regional forecasts that have marked its partial overcoming in various directions) - on which the research project would like to concentrate primarily - that requires a profound rethinking, with the result that the structuring of a truly post-parametric (i.e. capable of freeing itself from the quantitative matrix characteristic of the decree) and post-restrictive model still appears far away. Above all, the update of the list of functions (in which the car parks still stand out) dictated by the Ministerial Decree to which the placing in reserve of areas is preordained: in other words, an extension and diversification of the 'basket' of standards can no longer be postponed, in the direction of environmental, energy and technological endowments which have become essential, in the present season, to determine acceptable levels of urbanity in every part of the territory.

**7- Project title: DIRECTING THE CHOICES OF WATER AND, MORE IN GENERAL, ENVIRONMENTAL AND ENERGY CONSUMPTION**

Project description: The project aims to combine, with an interdisciplinary approach, legal analysis



	<p>and behavioral sciences, in order to identify, in the economics of public water management policies and environmental resources, the most suitable measures to guide the behavior of the end users of the services, towards virtuous consumption choices.</p> <p>Aware of the insufficiency of an exclusively "prescriptive" approach to the problem of safeguarding water and environmental resources, the research, at the crossroads between legal reflection and behavioral sciences, intends to focus on the cognitive mechanisms which, in response to legal constraints, trigger the choices and conduct of service users.</p> <p>The importance of reflecting on the issues proposed here clearly emerges from the premises of the PNRR, according to which "Italy is particularly vulnerable to climate change and, in particular, to the increase in heat waves and droughts".</p> <p>And in fact, Mission 2 of the PNRR, "Green revolution and ecological transition", includes among the objectives that of "Protection of the territory and water resources" (M2C4), with particular regard to "guaranteeing the security of supply and sustainable management and efficient use of water resources along the entire cycle".</p>
Non-funded scholarships:	0
Requirements:	<p>Master's Degrees in: Law, Cultural Anthropology and Ethnology, Archaeology, Landscape Architecture, Archive and Library Science, Architectural and Environmental heritage preservation, Cultural heritage preservation and restoration, Information and Publishing Systems, Modern European and American Languages and Literatures, Modern Languages for International communication and Cooperation, Linguistics, IT methodologies applied to Humanistic Disciplines, Territory and city planning, Design and Management of Tourism Systems, Design and Management of Educational Services, Psychology, International Relations, Cognitive Sciences, Political Sciences, Performing Arts and Media Production, Philosophical Sciences, Historical Sciences, Pedagogical Sciences, Welfare</p>



	services and Policy, Sociology and Social Research, History of Art, Communication Theories, Criminology, Geography; Modern Philology; Philology, Ancient Literature and History; Musicology and Cultural Heritage.
Assessment type:	<p>1- written test 2- evaluation of qualifications 3- oral exam</p> <p>The oral and written tests are face-to-face only and are considered passed if the candidate obtains a score of no less than 40/60 in each one.</p>
Assessment Criteria:	<p>Criteria for the assessment of qualifications, with a maximum overall score of 60 points.</p> <p>1) Graduation score: Marks from 60 to 70: 1 point Marks from 71 to 80: 3 points Marks from 81 to 90: 5 points Marks from 91 to 98: 10 points Marks from 99 to 103: 14 points Marks from 104 to 107: 16 points Marks from 108 to 109: 18 points Mark 110: 19 points Mark 110 cum laude: 20 points</p> <p>2) Relevance of the Dissertation topic: from 0 to 5 points, keeping into account also the level of interdisciplinarity, interest and development potential of the subject matter.</p> <p>3) Research activity: a. Scientific publications (papers published in scientific journals, chapters in volumes, or books with ISBN): from 0 to 10 points overall, in relation to the relevance to the doctorate's subject matter, to the prestige and quality of the publications; b. Research activity: from 0 to 10 points, with particular reference to the award of fellowships, research grants, periods, collaborations.</p> <p>4) Further education: from 0 to 5 points, overall, with special reference to refining courses, master courses, dissertation awards, as well as in regard to the relevance to the the doctorate's topic and the prestige of the qualifications.</p> <p>5) Teaching at the university level: from 0 to 10 points, overall, with particular regard to workshops, contracts, and to the role of "topic</p>



	expert”, in relation to the quality and relevance to the doctorate’s subject matter. Interviews will be focused on determining the candidates’ educational background, evaluating research projects proposed by the candidates and assessing their knowledge of English and any other language they have indicated.
Calendar:	Date, time and place will be made public at the following address: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">https://www.uninsubria.eu/opportunity/call-phd-xxxix</a>

Assessable Qualifications:	Curriculum Vitae, including education, previous research experiences, thesis/dissertation title and publications.
	Self-certification or certification of the Master’s Degree transcript of records with dates, marks, type of title and final mark.
	For students waiting for the attainment of the Master’s Degree: self-certification or certification of the Master’s curriculum transcript of records with dates and marks.
	Abstract of the Master’s Degree Dissertation.
	Publications.
	Any other useful qualification such as: specialization and postgraduate courses, awards, grants, teaching activities, PhDs, collaboration in research activities.
	Recommendation letters (max. 3), by University professors or researchers. Such letters will be included directly by the evaluators into the on-line procedure. While filling out the online registration, applicants will have to enter the names and e-mail addresses of the identified referents.
A numbered list of all the qualifications and documents supporting the application.	

<b>PHYSICS AND ASTROPHYSICS</b>	
Scientific Area:	Physics and Astrophysics



Curricula:	Physics
Reference person:	Prof. Giuliano Benenti – giuliano.benenti@uninsubria.it – tel +39 031 238 6271
Duration:	3 years
Department:	Science and High Technology
Number of Scholarships:	<p>1 pursuant to Ministerial Decree 118 of 02/03/2023 on the type of action PNRR doctorates, including:</p> <ul style="list-style-type: none"> <li>- 1 scholarship on project “<b>Energy transfer in complex quantum networks</b>”.</li> </ul> <p>The PhD project focuses on energy transfer in quantum networks, from spin chains to more complex topologies. In this context, the selected candidate will work under the supervision of Prof. Giuliano Benenti and will work in close collaboration with groups at Univ. Genova (Profs. Dario Ferraro and Maura Sassetti) and at CERN Quantum Technology Initiative (Dr. Michele Grossi), so that he/she will be inserted in an international competitive team, spending at least 6 months of study and research abroad. Machine learning tools will be used to optimize energy transfer between selected nodes of the network, including noise and disorder effects. Theoretical studies will be supplemented by simulations on various real quantum devices, including the ones available from IBM Quantum Experience platform, remotely accessed through cloud quantum programming.</p> <ul style="list-style-type: none"> <li>- 1 scholarship on the project “<b>Do G-quadruplexes and i-motifs act synergistically in tuning functional genomic sites?</b>”</li> </ul> <p>The PhD project is aimed at elucidating the folding pathways of G-quadruplexes (G4) and i-motifs (i-DNA), two non-Watson-Crick DNA conformations which play a crucial role in gene regulation. Because complementary sequences of DNA can fold into guanine-rich G4 and cytosine-rich i-DNA, respectively, the main scientific questions that the project intends to address are: (i) whether the two structures can coexist, (ii) what the role of their interplay in the folding energy landscapes is, (iii) if they act synergistically in tuning gene expression.</p> <p>In the first part of the PhD, the candidate will be involved in genome-wide bioinformatics analyses with the scope of evidencing a number of promotorial sites containing face-to-face sequences capable of folding into G4 and i-DNA, respectively. These DNA tracts will be encompassed in oligonucleotide constructs explicitly designed to mimic a gene promoter in vitro. The constructs will be submitted to a multilevel experimental protocol.</p>



	<p>According to the above project plan, experience in bioinformatics and/or advanced fluorescence spectroscopy will be considered as figures of merit in the selection of the candidate.</p> <p>The awarded student will work in a dynamic and multidisciplinary environment. Her/his research activities will mainly take place at the Laboratory of Photophysics and Biomolecules of the Dept. of Science and High Technology of the University of Insubria, under the supervision of Dr. Luca Nardo, who will act as her/his PhD tutor. However, in the sought of maximizing the impact of the PhD in her/his scientific formation and allow her/him to get experience in any of the aspects of the research project, the candidate will be required to be available for working periods at the Busto Arsizio headquarters, where the bioinformatics analyses will be supervised by Prof. Mauro Fasano. Moreover, the candidate will be required to spend at least six months of her/his PhD internship abroad, either at the Laboratory of Prof. Justin Lemkul (Virginia Polytechnic), to perform molecular dynamics simulations on the G4 and i-DNA conformational dynamics aimed at interpreting the SM-FRET results, or at the Laboratories of Prof. Jean-Louis Mergny (INSERM Paris) who is developing super-resolution fluorescence protocols to achieve genome-wide colocalization mapping of G4 and i-DNA in archea cells. Further mobility periods may be spent at the biochemistry laboratories of Prof. Claudia Sissi in Padua, to learn how to prepare oligonucleotide constructs.</p>
<p>Positions without scholarship:</p>	<p>0</p>
<p>Assessment:</p>	<p>The assessment of each candidate will be based on an interview, consisting of the discussion of a research project sent by the candidate, consistently with the topic of one of the scholarships.</p> <p>Interviews can be hold in English.</p> <p><b>Only candidates who score at least 40 points in the evaluation of qualifications will be admitted to the interviews.</b></p> <p>Assessable Qualifications:</p> <ul style="list-style-type: none"> <li>- Self certification or certification of the transcript of records the bachelor's degree with date, type of title and final mark. Self-certification or certification of the transcript of records the master's degree with date, type of title and final mark. For students awaiting receipt of master's degree: self-certification or certification of the transcript of records of the master's curriculum with dates and marks.</li> </ul>





	<p>(up to a maximum of 15 points)</p> <p>- Relevance of the scientific profile to the themes of the Doctorate, as inferred by the curriculum vitae, the master’s thesis abstract, and the recommendation letters (no more than 3) from academics or researchers with whom the candidate has worked. The letter will be placed directly by the evaluators in the on-line procedure. Applicants will have to enter in the online registration form the name and e-mail address of the referent identified. The writers of the letters should provide information on their role in their institution, their connection with the applicant, an evaluation of the applicant’s past performance in comparison to students (with approximately the same amount of training and experience as the applicant) known during their professional career. The letters should highlight the major strengths and weaknesses of the applicant, with particular regard to his/her ability to pursue and successfully complete the PhD program. <b>The letters will be accepted in the online procedure until 25 August 2023 at 12:00 (Central European Summer Time).</b></p> <p>(up to a maximum of 15 points)</p> <p>- Submission of a project consistent with one of the topics of the call (up to a maximum of 30 points).</p> <p>Candidates must submit and self-certify a list of all the qualifications.</p>
Calendar:	<p><b>September 4, 2023</b> (The schedule will be announced with a subsequent notice on the University website: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">https://www.uninsubria.eu/opportunity/call-phd-xxxix</a>) The list of those admitted to the oral test will be published after August 28, 2023</p>

**COMPUTER SCIENCE AND MATHEMATICS OF COMPUTATION**

Scientific field	01 - Mathematics and informatics; 09 - Industrial and information engineering; 13 – Economics and statistics
Academic disciplines	INF/01; ING-INF/05; MAT/01; MAT/03, MAT/05; MAT/07; MAT/08; SECS-S/01.
Coordinator	Professor Barbara Carminati – <a href="mailto:barbara.carminati@uninsubria.it">barbara.carminati@uninsubria.it</a>
Duration	3 years
Administrative headquarters department	Theoretical and Applied Sciences



Scholarships	<ul style="list-style-type: none"> <li>- The research project examines the deterioration of stone and/or marble surfaces and monumental stones in general by chemical or biological agents using mathematical models calibrated with in-situ and in-laboratory experiments. The primary objective is to develop an innovative and technologically advanced tool for monitoring the state of deterioration of monumental stones and its numerical simulation, which is capable of optimizing protection and restoration interventions and predicting the rates of deterioration based on the evolution of pollution.</li> <li>- IoT devices have become a primary target of cyber attacks. Networks of compromised devices, called BotNets, are being used daily to carry out DDoS attacks, causing significant disruption to services and substantial economic damage. The goal of the research is to investigate a process for malware detection before deployment that leverages blockchain to support collaboration between different parties for secure information sharing. This project aims to define decentralized techniques for IoT malware detection and leverage the blockchain to ensure the proper and confidential execution of the detection process.</li> </ul>
Positions without scholarships	0
Evaluation criteria	<p>Up to a maximum of 60 points.</p> <p>Qualifications</p> <ul style="list-style-type: none"> <li>- exam marks and, if candidates have already discussed their thesis, final mark (up to a maximum of 20 points);</li> <li>- scientific significance, degree of originality and relevance of the research project and thesis (if it has already been discussed) to the themes of the Doctoral Program (up to a maximum of 15 points; for the evaluation of the thesis candidates must submit at least a detailed abstract of the thesis itself; they may also submit the full version of the thesis);</li> <li>- conference presentations and publications pertinent to the themes of the Doctoral Program (up to a maximum of 5 points);</li> <li>- training activities and professional experience pertinent to the themes of the Doctoral Program (up to a maximum of 5 points);</li> <li>- other qualifications, including language certifications and no more than 2 letters of recommendation (up to a maximum of 15 points).</li> </ul> <p><b>Only the candidates who have obtained at least 40 points in the qualification evaluations will be admitted to the oral test.</b></p>
Test type	<p>The candidates who have obtained at least 40 points in the qualifications evaluation will be tested on their scientific interests, on the reasons which persuaded them to register for this specific Doctoral Program and on a description of their own research project or, as an alternative to the latter, on an analysis of a research field which is pertinent to the specific themes of the Doctoral Program. Knowledge of the English language will also be assessed.</p>



	The admission test may be taken in English upon the candidate's request.
Test schedule	The date of the interview will be communicated with a notice on the website at: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">at https://www.uninsubria.eu/opportunity/call-phd-xxxix</a>
Qualifications	CV with personal data, education (with courses length and marks), previous research experiences, theses and publications Candidates are required to present their Curriculum Vitae in .pdf format by using the appropriate template to be downloaded from this link: <a href="https://archivio.uninsubria.it/files/cvtemplate2021docx">https://archivio.uninsubria.it/files/cvtemplate2021docx</a>
	Self-certification, which must be dated and signed, of the academic degree (4-year, second degree or Master's degree), with the list of exams and relative marks, the University which issued the qualification, the attainment date and final mark
	Self-certification, which must be dated and signed, of the Bachelor's Degree qualification, with date, final mark and list of exams with relative marks
	For graduands: Self-certification, which must be dated and signed, of the exams and relative marks. Please indicate the expected date for the final exam
	Thesis or detailed abstract of the same (in electronic format) (4-year degree, second degree or Master's degree)
	Research project aimed at: <ul style="list-style-type: none"> <li>- developing novel tools and models for monitoring and simulating the state of degradation of monumental stones; or</li> <li>- <b>design of a blockchain-based malware detection system.</b></li> </ul>
	Publications (including conference presentations)
	Specialization courses, doctoral programs, training courses, master courses, awards, scholarships; research grants and scholarships, teaching activities already carried out (seminars, contracts, honorary fellowships), and collaborations for research activities
	Letters of recommendation (up to three) written by academic professors or researchers with whom the candidate worked (these will be directly submitted by the evaluators in the online procedure, the candidates will have to enter the name and email address of the identified contact person while registering online to the selection procedure)
	Other qualifications which candidates deem useful for the evaluation
<b>METHODS FOR ACCELERATION IN THE HPC FIELD FOR THE ANALYSIS OF ASTROPHYSICAL DATA IN THE ERA OF BIGDATA. PROJECT PNRR M4C2, INVESTMENT LINE 1.4 PROJECT PROPOSAL CN00000013 -</b>	



<p><b>NATIONAL CENTER FOR HPC, BIG DATA AND QUANTUM COMPUTING</b>  <b>NOTICE N. 3138 OF 12.16.2021 AND AMENDED WITH D.D.3175 OF 12.18.2021</b>  <b>"PUBLIC NOTICE FOR THE PRESENTATION OF INTERVENTION PROPOSALS</b>  <b>FOR THE STRENGTHENING OF RESEARCH STRUCTURES AND CREATION OF</b>  <b>"NATIONAL CHAMPIONS "R&amp;D ON SOME KEY ENABLING TECHNOLOGIES"</b>  <b>TO BE FINANCED UNDER THE PNRR" – CUP C53C22000350006</b></p>	
Scientific field	01 - Mathematics and informatics; 09 - Industrial and information engineering; 13 – Economics and statistics
Academic disciplines	INF/01; ING-INF/05; MAT/01; MAT/03, MAT/05; MAT/07; MAT/08; FIS/01; FIS/02; FIS/05; SECS-S/01.
Coordinator	Professor Barbara Carminati – <a href="mailto:barbara.carminati@uninsubria.it">barbara.carminati@uninsubria.it</a>
Duration	3 years
Administrative headquarters department	Theoretical and Applied Sciences
Scholarships	1 financed by Inaf with funds from PNRR M4C2, line 1.4, prog. CN00000013 CN HPC for Big DATA & Quantum Computing
Positions without scholarships	0
Evaluation criteria	<p>Up to a maximum of 60 points.</p> <p>Qualifications</p> <ul style="list-style-type: none"> <li>- exam marks and, if candidates have already discussed their thesis, final mark (up to a maximum of 20 points);</li> <li>- scientific significance, degree of originality and relevance of the research project and thesis (if it has already been discussed) to the themes of the Doctoral Program (up to a maximum of 15 points; for the evaluation of the thesis candidates must submit at least a detailed abstract of the thesis itself; they may also submit the full version of the thesis);</li> <li>- conference presentations and publications pertinent to the themes of the Doctoral Program (up to a maximum of 5 points);</li> <li>- training activities and professional experience pertinent to the themes of the Doctoral Program (up to a maximum of 5 points);</li> <li>- other qualifications, including language certifications and no more than 2 letters of recommendation (up to a maximum of 15 points).</li> </ul> <p><b>Only the candidates who have obtained at least 40 points in the qualifications evaluation will be admitted to the oral test.</b></p>
Test type	<p>The candidates who have obtained at least 40 points in the qualifications evaluation will be tested on their scientific interests, on the reasons which persuaded them to register for this specific Doctoral Program and on a description of their own research project or, as an alternative to the latter, on an analysis of a research field which is pertinent to the specific themes of the Doctoral Program. Knowledge of the English language will also be assessed.</p> <p>The admission test may be taken in English upon the candidate's request.</p>



Test schedule	The date of the interview will be communicated with a notice on the website at: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">at https://www.uninsubria.eu/opportunity/call-phd-xxxix</a>
Qualifications	CV with personal data, education (with courses length and marks), previous research experiences, theses and publications Candidates are required to present their Curriculum Vitae in .pdf format by using the appropriate template to be downloaded from this link: <a href="https://archivio.uninsubria.it/files/cvtemplate2021docx">https://archivio.uninsubria.it/files/cvtemplate2021docx</a>
	Self-certification, which must be dated and signed, of the academic degree (4-year, second degree or Master's degree), with the list of exams and relative marks, the University which issued the qualification, the attainment date and final mark
	Self-certification, which must be dated and signed, of the Bachelor's Degree qualification, with date, final mark and list of exams with relative marks
	For graduands: Self-certification, which must be dated and signed, of the exams and relative marks. Please indicate the expected date for the final exam
	Thesis or detailed abstract of the same (in electronic format) (4-year degree, second degree or Master's degree)
	Research project related to the development of efficient and scalable techniques and algorithms for the analysis of large amounts of astrophysics data.
	Publications (including conference presentations)
	Specialization courses, doctoral programs, training courses, master courses, awards, scholarships; research grants and scholarships, teaching activities already carried out (seminars, contracts, honorary fellowships), and collaborations for research activities
	Letters of recommendation (up to three) written by academic professors or researchers with whom the candidate worked (these will be directly submitted by the evaluators in the online procedure, the candidates will have to enter the name and email address of the identified contact person while registering online to the selection procedure)
	Other qualifications which candidates deem useful for the evaluation

<b>EXPERIMENTAL AND TRANSLATIONAL MEDICINE</b>	
Scientific field:	Medicine; Biology; Biomedicine
Referent:	Prof. Mauro Fasano <a href="mailto:mauro.fasano@uninsubria.it">mauro.fasano@uninsubria.it</a>
Duration:	3 years
Department:	Science and High Technology



Scholarships:	1
Requirements:	MS Degree in Medicine and Surgery; Biology; Biotechnology; Pharmacy; Chemistry and Pharmaceutical Technologies; Chemical Sciences; Dentistry, Physics; Movement Science
Assessment: Interview:	<p>Candidates obtaining at least 30/60 in the evaluation of qualifications will be admitted to the interview. Candidates will be interviewed in relation to their scientific interests and their motivation to enroll in this PhD program. Candidates will discuss the research proposal attached to the application with particular regard to the scientific soundness and timeline of the milestones.</p> <p>The cultural background will be assessed with particular reference to issues related to the research project written by the Candidate, the ability to discuss the most relevant discoveries in the related scientific field, methodological and research skills in both the laboratory and clinical settings, personal motivation to research in Translational Medicine, proficiency in scientific English. Foreign candidates will be interviewed in English.</p> <p>The interviews will take place <b>in person</b>, unless specifically authorized by the examining Commission after written request by the Candidate.</p>
Commitment of PhD students	Full time research activity
Research projects	A New Artificial Intelligence Drug Repurposing Approach for Fibromyalgia. PI: Tiziana Alberio, <a href="mailto:tiziana.alberio@uninsubria.it">tiziana.alberio@uninsubria.it</a>
Calendar:	05 September 2023 (Qualification) – 11 September 2023 (Interview), in Varese
Assessable Qualifications:	<p>Curriculum vitae presented using <b>exclusively</b> the proposed format (see attached template)</p> <p>Signed self-certification or certification of the transcript of records of the Master’s Degree with dates, marks, type of title and final mark.</p> <p>Signed self-certification or certification of the transcript of records of the Bachelor’s Degree with date, type of title and final mark.</p> <p>For Students still awaiting the attainment of the MD degree or Master Diploma: signed self certification or certification of the transcript of records of the University</p>



	course/Master's curriculum with dates and marks
	Electronic version of the thesis for the MD or MSc degree
	Research proposal. The candidate will submit a research proposal (max. 2 pages) for the research theme written above. The proposal will contain a brief introduction, a description of the activities with a Gantt chart, expected results and their impact.
	Publications (or manuscripts accepted for publication) and congress abstracts
	Other useful qualification such: specialization and postgraduate courses, awards, grants, didactic activities, collaboration to research activities.
	Reference Letters (Max. 3), by University professors or researchers. The letter will be placed directly by the evaluators in the on-line procedure. Applicants will have to enter in the online registration form the name and e-mail address of the referent identified. It is suggested to start the procedure in time.
	Any other qualification that the Candidate considers of relevance for the evaluation

<b>CLINICAL AND EXPERIMENTAL MEDICINE AND MEDICAL HUMANITIES</b>	
Scientific field	05 – Biology; 06 Medicine; 14 – Political and social sciences
Academic disciplines	BIO/09; BIO/11; BIO/13; BIO/14; M-FIL/02; M-FIL/03; MED/02; MED/04; MED/09; MED/10; MED/11; MED/15; MED/17; MED/25; MED/26; MED/39; MED/41; MED/43; MED/44; SPS/01.
Coordinator	Professor Marco Cosentino – <a href="mailto:marco.cosentino@uninsubria.it">marco.cosentino@uninsubria.it</a>
Duration	3 years
Administrative headquarters department	Medicine and Surgery
Scholarships	1 pursuant to Ministerial Decree 118 of 02/03/2023 on the subject of Research PNRR
Positions without scholarships	0



Admission requirements	<p>All candidates who hold a Master’s Degree, specifically in one of the following fields, may access the Doctoral Program: medicine and surgery, dentistry and orthodontics, veterinary medicine, literature and philosophy, communication, biology, biotechnology, pharmacy, psychology, chemistry and pharmaceutical biotechnologies, and law and economics.</p> <p>An adequate cultural education and suitable personal journey to undertake the Doctoral Program will be specifically assessed and evaluated during the admission test.</p>
Test type	<p>The assessment will be focused on the preparation of a written research project on the topic "Practices for legitimizing power, health emergencies and public health", short description:</p> <p>The research project aims to analyze the processes of legitimization of political power in relation to public health and the management of health emergencies. In particular, the political practices and the imaginary of surveillance and control will be examined according to their coherence with fundamental rights such as the protection of human life (in an individual and collective sense), freedom of expression and self-ownership . The interaction with new technologies will also be explored in terms of the right to privacy, distinction between public and private, use of electronic surveillance systems, manipulation of public debate and interaction between thought, language, virtualisation of reality and artificial intelligence.</p> <p>And an interview to discuss the submitted project with particular attention to:</p> <ul style="list-style-type: none"> <li>• the relevance of the project for the PhD course topics</li> <li>• its feasibility in relation to the 3-y PhD course duration</li> <li>• its originality</li> <li>• its clarity.</li> </ul> <p>Candidates will be given one hour to draw the project. During the interview, knowledge of the English language will be also assessed.</p>
Evaluation criteria	<p><u>Qualifications evaluation criteria</u></p> <ul style="list-style-type: none"> <li>- 10 points for the degree final mark;</li> <li>- 10 points for other academic qualifications;</li> <li>- 15 points for the relevance of the thesis;</li> <li>- 15 points for publications which are pertinent to the themes of the program;</li> <li>- 10 points for other qualifications which are pertinent to the themes of the program.</li> </ul> <p>The qualifications must be supplied with (under penalty of exclusion) a list of the qualifications.</p>





Test schedule	Written research project: 20 september 2023, 2PM Interview: 22 september 2023, 9AM The venues of the test will be communicated with a notice on the website at: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">https://www.uninsubria.eu/opportunity/call-phd-xxxix</a>
Qualifications	Self-certification, which must be dated and signed, of the academic degree (4-year, second degree or Master's degree), the University which issued the qualification, the attainment date and final mark
	Self-certification, which must be dated and signed, of any other academic qualifications with date and final mark
	For graduands: Self-certification, which must be dated and signed, with the expected date of the final exam
	Thesis (in electronic format) (4-year degree, second degree or Master's degree). Please attach the full version, without this the thesis will not be evaluated.
	Any publications (including conference presentations). Please attach the full version, without this the publication will not be evaluated.
	Specialization courses, doctoral programs, training courses, master courses, awards, scholarships; research grants and scholarships, teaching activities already carried out (seminars, contracts, honorary fellowships), and collaborations for research activities;
	A numbered list of all submitted qualifications. <b>Important:</b> only qualifications included in the list will be evaluated. Lack of the list will result in exclusion from the contest.
<b>CLINICAL AND EXPERIMENTAL MEDICINE AND MEDICAL HUMANITIES</b>	
Scientific field	05 – Biology; 06 Medicine; 14 – Political and social sciences
Academic disciplines	BIO/09; BIO/11; BIO/13; BIO/14; M-FIL/02; M-FIL/03; MED/02; MED/04; MED/09; MED/10; MED/11; MED/15; MED/17; MED/25; MED/26; MED/39; MED/41; MED/43; MED/44; SPS/01.
Coordinator	Professor Marco Cosentino – <a href="mailto:marco.cosentino@uninsubria.it">marco.cosentino@uninsubria.it</a>
Duration	3 years
Administrative headquarters department	Medicine and Surgery
Scholarships	1 funded with by the Fondazione Cariplo Medical Scientist Training Program 2017



Positions without scholarships	0
Admission requirements	<p>Only candidates who are graduated in medicine and surgery are eligible for this doctoral position. Being enrolled in a medical specialization school is a preferred condition, and in particular being in position to enjoy the possibility of a specialization-doctorate connection as allowed by current legislation.</p> <p>An adequate cultural education and suitable personal journey to undertake the Doctoral Program will be specifically assessed and evaluated during the admission test.</p>
Test type	<p>The selection will be based on a test consisting in the preparation of a written research project dealing with an original topic of internal and / or specialist medical interest and which foresees for its realization the coherent and coordinated use of methodologies and clinical and laboratory research activities, followed by an oral interview in which the candidate will be asked to discuss the research project, with regard to:</p> <ul style="list-style-type: none"> <li>• its feasibility within the PhD program;</li> <li>• the originality of the proposal;</li> <li>• the clarity of the exposition.</li> </ul> <p>Candidates will be given one hour to draw the project. Part of the interview will be devoted to assessing the candidate's knowledge of a foreign language.</p>
Evaluation criteria	<p><u>Qualifications evaluation criteria</u></p> <ul style="list-style-type: none"> <li>- 10 points for the degree final mark;</li> <li>- 10 points for other academic qualifications;</li> <li>- 15 points for the relevance of the thesis;</li> <li>- 15 points for publications which are pertinent to the themes of the program;</li> <li>- 10 points for other qualifications which are pertinent to the themes of the program.</li> </ul> <p>The qualifications must be supplied with (under penalty of exclusion) a list of the qualifications.</p>
Test schedule	<p>Written research project: 20 september 2023, 2PM Interview: 22 september 2023, 9AM</p> <p>The venues of the test will be communicated with a notice on the website at: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">https://www.uninsubria.eu/opportunity/call-phd-xxxix</a></p>
Qualifications	<p>Self-certification, which must be dated and signed, of the academic degree (4-year, second degree or Master's degree), the University which issued the qualification, the attainment date and final mark</p>



	Self-certification, which must be dated and signed, of any other academic qualifications with date and final mark
	For graduands: Self-certification, which must be dated and signed, with the expected date of the final exam
	Thesis (in electronic format) (4-year degree, second degree or Master's degree). Please attach the full version, without this the thesis will not be evaluated.
	Any publications (including conference presentations). Please attach the full version, without this the publication will not be evaluated.
	Specialization courses, doctoral programs, training courses, master courses, awards, scholarships; research grants and scholarships, teaching activities already carried out (seminars, contracts, honorary fellowships), and collaborations for research activities;
	A numbered list of all submitted qualifications. <b>Important:</b> only qualifications included in the list will be evaluated. Lack of the list will result in exclusion from the contest.

<b>METHODS AND MODELS FOR ECONOMIC DECISIONS</b>	
Scientific field	13 - Economics and statistics
Academic disciplines	SECS-P01, SECS-P02, SECS-P03, SECS-P04, SECS-P05, SECS-P06, SECS-P07, SECS-P08, SECS-P12; SECS-S03, SECS-S06, M-PSI/01, SECS/S01, MAT/05, MAT/06, MAT/09, INF/01, ING/INF 05.
Coordinator	Prof. Andrea Vezzulli <a href="mailto:andrea.vezzulli@uninsubria.it">andrea.vezzulli@uninsubria.it</a>
Duration	3 years
Administrative headquarters department	Economics
Scholarships	1 (DM 118 del 02-03-2023 - Ricerca PNRR) on the following topic:  <b>1) TOWARDS EXPLAINABLE, INTERPRETABLE, HUMAN-CENTRIC ARTIFICIAL INTELLIGENCE IN BUSINESS, ECONOMICS. AND SOCIETY</b> Artificial Intelligence (AI) technologies and models can compete and sometimes surpass human performance in a variety of tasks and support the decision-making process in multiple domains. Indeed, AI techniques and technologies are used to search data, to discover insights, to uncover hidden patterns, and to help the



	<p>decision-making process, the human-machine interaction, and the overall customer experience. AI is usually split into two domains: Data-Centric AI and Human-Centric AI.</p> <p>Data-Centric AI refers to those domains of AI that use data to create models, and its main subfield is Machine Learning (ML). Human-centric AI, instead, comprises any AI system that amplifies and augments rather than displaces human abilities. Human-centric AI seeks to preserve human control in a way that ensures AI meets our needs while also operating transparently, ethically, delivering equitable outcomes, respecting privacy, and showing fairness in ML predictions.</p> <p>This project will mainly focus on recent trends in Human-Centric AI. There are several challenges to developing Human-Centric AI. One challenge is that it can be difficult to create explanations that are both comprehensible and accurate. Additionally, these systems may be less efficient than traditional AI systems because they require additional resources to generate explanations. Classical paradigms and methodologies developed in computer science research need to be adapted to this context. Research questions include: which is an acceptable level of algorithm accuracy when dealing with human-centric data in business and society? Can we accept that a certain algorithm performs better than others without providing a justification? And, how do we proceed if a certain algorithm suggests a solution different than the opinion of a decision maker? Can a robot replace a decision maker in business and society? If yes, for which tasks? Or is it better to consider AI as a decision-making support system when dealing with humans? And, is experimental data available if we want to train a specific machine learning algorithm? Are there biases (ethnicity, gender, etc.) when analysing human data? And, if yes, can they be explained?</p>
<p>Evaluation criteria and suitable qualifications</p>	<p>Assessable qualifications; up to 60 points:</p> <ul style="list-style-type: none"> <li>– relevance of research project related to topics of the PhD and to the topics of the project reported above (up to 20 points). The research project is a necessary is required for a valid application;</li> <li>– graduation final mark (up to 10 points);</li> <li>– relevance of the final dissertation for the PhD topics and for the topics of the project reported above (up to 10 points; the applicant must submit an abstract of the thesis or its integral version);</li> <li>– publications and conference presentations on topics relevant for the PhD program and for the topics of the project reported above (up to 5 points);</li> </ul>



	<p>– training activities and professional experience relevant for the PhD and for the topics of the project reported above (up to 5 points);</p> <p>– any other assessable qualification, including language certifications, and up to 3 recommendation letters (up to 10 points).</p> <p><b>Only applicants awarded with a minimum of 40 points on the qualification assessment are admitted to the interview.</b></p>
Test type:	<p><u>Only applicants who have obtained at least 40 points in the qualification assessment are admitted to the interview.</u> Applicants are interviewed on their scientific interests and their motivations for applying to this specific PhD program.</p> <p>The interview can be evaluated <u>up to a maximum of 60 points</u>, and is considered as passed only if the applicant obtains at least 40 points.</p> <p>The interview, which is public, tests the basic knowledge of economics and quantitative topics, as well as the knowledge of English, and could involve a discussion of possible research lines related to the PhD. Applicants may perform the interview in English or Italian.</p>
Test schedule	<p>Time and place for the test will be communicated with a notice on the website at: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">https://www.uninsubria.eu/opportunity/call-phd-xxxix</a>.</p>
Assessable documents (to be uploaded as attachments to the application form)	<p>CV with personal data, education (with courses length and marks), previous research experiences, theses, and publications.</p> <p>Candidates are required to present their Curriculum Vitae in .pdf format by using the proposed template <a href="https://www.uninsubria.it/files/cvtemplate2023mmeddocx">https://www.uninsubria.it/files/cvtemplate2023mmeddocx</a></p>
	<p>Certificate or self-certification, which must be dated and signed, of the academic degree (4-year, second degree or Master’s degree), with the list of exams and relative marks, the University which issued the qualification, the attainment date and final mark.</p>
	<p>For graduands: Certificate or self-certification, which must be dated and signed, of the exams and relative marks. Please indicate the expected date for the final exam</p>
	<p>Thesis or detailed abstract of the same (in electronic format) (4-year degree, second degree or Master’s degree)</p>
	<p>Certificate or self-certification, which must be dated and signed, of the Bachelor’s Degree qualification, with date, final mark and list of exams with relative marks</p>
	<p>Research project pertinent to the themes of the Doctoral Program and to the topics of the project reported above</p>
	<p>Publications (including conference presentations)</p>



	Specialization courses, doctoral programs, training courses, master courses, awards, scholarships; research grants and scholarships, teaching activities already carried out (seminars, contracts, honorary fellowships), and collaborations for research activities
	Letters of recommendation (up to three) written by academic professors or researchers The letters of recommendation will be directly sent by the contact person via the online procedure: candidates will have to enter the name and email address of the identified contact person while registering online to the selection procedure.
	Any other documents that can be evaluated

<b>CHEMICAL AND ENVIRONMENTAL SCIENCES</b>	
Scientific fields:	Environmental Engineering; Industrial Engineering; Chemistry; Earth Sciences; Biology; Environmental and Occupational Hygiene;
Curricula	3. Chemical Sciences 4. Environmental Sciences Further information can be found at: <a href="https://dottorato.disca.uninsubria.it/">https://dottorato.disca.uninsubria.it/</a>
Coordinator	Prof. Alessandro Maria Michetti - <a href="mailto:alessandro.michetti@uninsubria.it">alessandro.michetti@uninsubria.it</a>
Duration	3 years
Department, administration:	Scienze and High Technology
Scholarships	14 fully funded scholarships:  1 pursuant to Ministerial Decree 118 of 02.03.2023 on the subject of Public Administration 3 pursuant to Ministerial Decree 118 of 02.03.2023 on the subject of PNRR Research 1 pursuant to Ministerial Decree 118 of 02.03.2023 on the subject of Cultural Heritage 1 pursuant to Ministerial Decree 118 of 02.03.2023 on the subject of Green and Digital Transition 2 pursuant to Ministerial Decree 117 of 02.03.2023 co-financed by the Prometeon Tyre Group S.r.l. company 2 pursuant to Ministerial Decree 117 of 02.03.2023 co-financed by the ATS Città Metropolitana di Milano company 1 pursuant to Ministerial Decree 117 of 02.03.2023 co-financed by the Dekra Italia S.r.l. company 1 pursuant to Ministerial Decree 117 of 02.03.2023 co-financed by the Italfarmaco S.p.A. company



	1 pursuant to Ministerial Decree 117 of 02.03.2023 co-financed by the Vibram S.p.A. company 1 financed from PNRR PE Project NODES
Positions without scholarship	0
Requirements for admission:	Any Master's Degree (second or single cycle)
Assessment criteria and assessable qualifications	Up to a maximum of 60 points for the qualification assessment. Assessable qualifications: - graduation grade and full list of exams, including the marks obtained in the different examinations/activities; the average grade obtained during the degree will be considered; - project concerning the "Research Topics" as per specifications in the relevant section; - relevance of the degree to the subjects of the PhD program; submission of the dissertation title and abstract is mandatory; - publications relevant to the subjects of the PhD program; - further qualifications: presentations to congresses, participations to schools, job activities relevant to the subjects of the PhD program, further degrees, awards. <b>Applicants receiving at least 25 points for the qualification assessment will be admitted to the interview.</b>
Assessment: Interview	Up to a maximum of 60 points will be awarded for the oral exam, divided as follows: 30 points for the proposed research program; 30 points for the oral interview, including knowledge of the foreign language (10 points). Applicants receiving at least 25 points for the qualification assessment will be interviewed about their scientific interests, the motivations leading them to apply to this PhD program, the definition of a research project, <b>which must be included in the application as a .pdf file and must be focused to one of the "Research Topics" as per specifications in the relevant section below.</b> The goals, methodologies, procedures and scheduling of the project will be assessed during the interview. The cultural background will be assessed, with particular emphasis to the topics of the PhD program. Moreover, the ability to discuss the most important discoveries of the last decades in the chemical and environmental fields, the methodological and research competencies (e.g. modelling, lab activities, field activities), the knowledge of English and additional EU languages will be assessed.



	<p>The applicant may perform the interview in English. Further information can be found at the webpage <a href="https://dottorato.disca.uninsubria.it/">https://dottorato.disca.uninsubria.it/</a></p>
Research Topics:	<p>For this call, the research topics available, the scientists in charge, and the involved companies are as follows:</p> <p><b>CV Environmental Sciences</b> <b>DM 118</b></p> <p>1- In silico methods for the development of predictive models for the sustainable use of chemicals. In this research the QSAR approach is used to study properties related to the environmental behavior (e.g., persistence, atmospheric reactivity, mobility, and bioaccumulation) and the toxicity of organic substances belonging to various chemical classes and use categories. The presence in the environment of substances characterized by these properties can lead to alterations in the quality of water, soil, and air, as well as to risks for human health and the environment. QSAR models are effective alternatives to animal testing and can support risk assessment procedures and the design of sustainable alternatives to hazardous substances. Supervisor: Ester PAPA</p> <p><b>CV Environmental Sciences</b> <b>DM 118</b></p> <p>2- Development of Calorimetric Approaches for Estimating the Probability of Occurrence of Accidental Events in Companies at Risk of Major Accidents. Feasibility study of the application of calorimetric techniques (adiabatic, reaction calorimetry, differential scanning, thermogravimetry) in order to quantitatively specify the deviations of the process variables during the conduction of procedures for the identification of hazards (e.g. HAZOP, HAZID, AOR) which constitute the first operational step to be carried out in order to develop a correct analysis of the risk associated with the production site. This study is of particular interest for fully owned entities of the Public Administration such as the Experimental Stations for Industry (Innovhub - SSI). Responsible teacher: Sabrina COPELLI</p> <p><b>CV Chemical Sciences</b></p>



	<p><b>DM 118</b></p> <p>Sustainable technologies and guidelines for bio-cleaning systems for cultural heritage. The main objective of the research is the drafting of bio-cleaning protocols for works of art, involving products that are environmentally and economically sustainable and not harmful to restorers and surfaces. The main bio-technologies developed and successfully applied in recent years on stone and wall paintings will also be tested on other types of surfaces, such as writing materials, polychromes, metal, textiles, and mortars, to define the operating methods and biological and chemical analyses to evaluate their effectiveness. The results will be discussed to draft guidelines for restorers. Supervisor: Laura RAMPAZZI</p> <p><b>CV Environmental Sciences</b></p> <p><b>DM 118</b></p> <p>3- MITIGreen FOR LIFE. The project aims to develop new application tools for the mitigation of climate change based on the reduction of greenhouse gas emissions, in particular CO<sub>2</sub>, as well as to promote water retention in the soil through innovative methods of management of plant ecosystems both in natural, urban and agricultural. To this end, experimental activities of the use of biochar in urban and agricultural areas will be carried out to verify its applicability with a multidisciplinary approach. Responsible teacher: Nicoletta CANNONE</p> <p><b>CV Chemical Sciences</b></p> <p><b>DM 118</b></p> <p>4- SOLAR-QD (Sustainable Optoelectronic ARchitectures with colloidal Quantum Dots)- The specific objectives of SOLAR-QD are: <i>i</i>) developing efficient synthetic routes for the preparation of size- and shape-controlled environmentally friendly I-III-VI<sub>2</sub> QDs for optoelectronic and photovoltaic applications; <i>ii</i>) developing innovative experimental and modeling approaches for the atomic-to-nanometer scale characterization of these colloidal QDs, based on the synergic combination of reciprocal space X-ray total scattering methods; <i>iii</i>) correlating the structural and microstructural results</p>
--	--

	<p>obtained with the QDs functional properties. Supervisor: Federica BERTOLOTTI</p> <p><b>CV Chemical Sciences</b> <b>DM 118</b></p> <p>5- Catalysts for CO<sub>2</sub> conversion to high value added products. Study of catalysts for the CO<sub>2</sub> hydrogenation for the production of methanol, dimethyl ether and higher alcohols. The research will be focused on the catalytic material synthesis by different techniques preferring the use of water as solvent. The synthesized materials will be characterized for the evaluation of activity, selectivity and resistance to the deactivation. Supervisor: Carlo LUCARELLI</p> <p><b>CV Environmental Sciences</b> <b>DM 117</b></p> <p>6- Development, optimization and implementation of analytical methods for the detection and quantification of hazardous chemicals in the context of public health protection. The project, to be carried out at the Prevention Laboratory of the of the Agency for Health Protection of Metropolitan Area of Milan (ATS), plans to develop, validate and obtain accreditation for analytical methods in X-ray powder diffractometry and scanning electron microscopy within a laboratory context operating in compliance with the EN ISO/IEC 17025:2018. Supervisor: Andrea CATTANEO; company: ATS Città Metropolitana di Milano</p> <p><b>CV Environmental Sciences</b> <b>DM 117</b></p> <p>7- Development and implementation of new analytical methods aimed at the chemical safety of products, mixtures and articles available on the market (according to REACH and CLP Regulations). Starting from the analysis of the productive context of the territory, the project, to be carried out at the Prevention Laboratory of the Agency for Health Protection of Metropolitan Area of Milan, plans to develop and validate analytical methods also aimed at achieving official accreditation within the context of a laboratory operating in compliance with the EN</p>
--	---



	<p>ISO/IEC 17025:2018 standard. Supervisor: Andrea SPINAZZÉ; company: ATS Città Metropolitana di Milano</p> <p><b>CV Environmental Sciences</b> <b>DM 117</b></p> <p>8- Development of Innovative Techniques for the Safety Evaluation of Products in the Form of Powders. The objective of this PhD project will be to develop procedures that allow for clearly listing, by virtue of the substance under study, which information are essential within the safety data sheet as they are necessary for the purpose of assessing the risk associated with the substance itself (in all the processing and storage phases to which it is subjected during its stay within the companies). Responsible teacher: Sabrina COPELLI; company: Dekra Italia S.p.A.</p> <p><b>CV Chemical Sciences</b> <b>DM 117</b></p> <p>9- Synthesis of bifunctional molecules composed by Histone deacetylase inhibitor (HDAC) and MDM2-based PROTAC. ItalFarmaco S.p.A. is an important reality in the Italian pharmaceutical industry, which is active in the development of synthetic molecules for the modulation of epigenetic manifestations of mutated oncologic cells. We aim to investigate novel MDM2-based PROTAC targeting histone deacetylases (HDACs) enzymes. The collaboration among UniInsubria and ItalFarmaco will generate a high level of interdisciplinarity, in which the PhD student will work on the synthesis and on the biological evaluation of such dual-functional molecules, focusing her/his attention in evaluating different linker strategies, different HDAC inhibitors as well as comparing the PROTAC ability of such compounds. Supervisor: Silvia GAZZOLA; company: ItalFarmaco S.p.A.</p> <p><b>CV Chemical Sciences</b> <b>DM 117</b></p> <p>10- Synthesis and characterization of new "compounds" to decrease the air permeability of the tire liner. In this project two approaches will be explored: the synthesis</p>
--	--

and characterization of new polymers with low permeability; the use of innovative fillers that reduce the diffusion of air inside the liner. In the first case, polymers will be synthesized starting from molecules deriving from renewable sources to obtain materials with high Tg and low gas permeability. In the second case, compatibilized fillers, deriving from waste of the food industry, will be used. The collaboration with Prometeon S.r.l. will make possible the characterization of the new “*compounds*” by mechanical and gas permeability measurements using the advanced instrumentation of the company's laboratories. Supervisor: Lorella IZZO; company: Prometeon Tyre Group Srl.

**CV Chemical Sciences**

**DM 117**

11- Study on the use of devulcanized waste materials and reversible vulcanization. The devulcanization of elastomers allows to extend the life cycle of the vulcanized rubbers guaranteeing their reuse with the consequent reduction of the environmental impact. The project will focus on two aspects. The first concerns the implementation of devulcanization processes and the study of the mechanical properties and wear resistance of the new compounds obtained by introducing devulcanized materials. The second approach involves the study of vulcanization processes through reversible chemical reactions. In the latter case, the crosslinking between the chains will be formed not through sulfur bridges but by linkers from renewable sources, e.g. fatty acids. The reversibility of the process will allow the recovery of the devulcanized polymer at the end of the material's life cycle. The collaboration with VIBRAM S.P.A, a leading company in the production of soles for footwear, will allow the characterization of the new materials using the advanced instrumentation of the company's laboratories. Supervisor: Lorella IZZO; company: VIBRAM S.P.A.

**CV Chemical Sciences**

**DM 117**

12- Reactivity of inorganic oxide surfaces embedded inside tire compounds. The project belongs to



	<p>Missione 4 “Istruzione e Ricerca” of PNRR, Componente 2: “Dalla ricerca all’impresa”, Investimento 3.3, as it aims to foster the development of a skilled researcher capable of designing and characterizing advanced materials for the tire industry. The project focuses on the theoretical/computational investigation, as well as on the possible experimental characterization of the materials proposed via in silico studies, of the conjugation reaction between compound solid fillers and silane-based coupling agents, and of the reticulation reaction (vulcanization) induced by elemental sulfur and/or di- and tetra-sulfide species. Supervisor: Massimo Mella; company: Prometeon Tyre Group S.r.l.</p> <p><b>CV Chemical Sciences</b> <b>Project PNRR PE NODES</b></p> <p>13- Synthesis, development and characterization of acrylic/methacrylic film-forming agents (secondary dispersions) intended for the production of two-component water-based liquid paints, their transformation into paint products and subsequent characterization either in the liquid phase or after application. The synthesized film-forming agents will be characterized by a low VOC content. Furthermore, they will be synthesized using a certain percentage renewable carbon. The final objectives will be: - synthesis and industrialization of the best film-forming agent obtained; - formulation and industrialization of the finished paint product/s; - the "Green" certification of the product by determining the concentration of 14C. Supervisor: Carlo LUCARELLI</p>
Calendar:	<p>The list of candidates admitted to the interview will be posted at the following address: <a href="https://www.uninsubria.eu/opportunity/call-phd-xxxix">https://www.uninsubria.eu/opportunity/call-phd-xxxix</a></p> <p>The interviews will take place in Via Valleggio 11, Como, on a date between 4 and 5 September 2023, for the Chemical Sciences CV; and on a date between 14 and 15 September 2023, for the Environmental Sciences CV. Upon</p>



	motivated request of the candidate, it will be possible to carry out the interview on the Teams Platform and / or in English.
Assessable Qualifications:	<p><b>NOTE: Candidates are required to submit their Curriculum Vitae in pdf format using the appropriate template that can be filled in and downloaded at the following link:</b>  <a href="https://www.uninsubria.it/files/cvscienze-chimiche-e-ambientalidocx">https://www.uninsubria.it/files/cvscienze-chimiche-e-ambientalidocx</a></p>
	Self-certification, signed and dated, or certification of the transcript of records of the Master's Degree with date, type of title, final mark and the list of passed exams with their marks
	Self-certification, signed and dated, or certification of the transcript of records of the Bachelor's Degree (if any) with date, type of title, final mark and the list of passed exams with their marks
	For students not holding a Master's Degree: self-certification or certification of the transcript of records of the Master's curriculum with passed exams and marks. State the date when the Master's Degree will be presumably awarded
	Title and abstract of the Master Thesis
	Publications and presentations to congresses (if any)
	Specialization courses, other degrees, awards, scholarships, grants, teaching experience and collaboration to research programs (if any)
	Any other useful qualification

<b>LIFE SCIENCES AND BIOTECHNOLOGY</b>	
Scientific Area:	Biology; Agricultural and Veterinary Sciences
Referent:	Prof.ssa Silvia Sacchi – <a href="mailto:silvia.sacchi@uninsubria.it">silvia.sacchi@uninsubria.it</a>
Duration:	3 Years
Department:	Biotechnology and Life Sciences
Scholarships:	2 pursuant to Ministerial Decree 118 of 02/03/2023 on the subject Research PNRR
Requirements:	All master degree graduates (graduate degrees, single-cycle graduate degrees or other qualification obtained abroad and recognized as equivalent) can access the PhD course, especially graduates in: Biotechnology, Life sciences, Pharmacy, Chemistry and pharmaceutical technologies.
Assessment criteria:	<b>60 points</b> for the qualifications assessment divided as follows:



	<p>up to <b>15 points</b> for the graduation grade (or the average grade of all exams for undergraduates);</p> <p>up to <b>15 points</b> for the relevance of the thesis to the research topics covered by the PhD course;</p> <p>up to <b>24 points</b> for the congruence, quality, and originality of the research project (6000 characters spaces included) which must be submitted by the applicant, inherent to the topics indicated in the call;</p> <p>up to <b>3 points</b> for the curriculum and other assessable qualifications;</p> <p>up to <b>3 points</b> for publications and presentations at conferences;</p> <p>Only candidates who obtain at least <b>40 points</b> in the evaluation of qualifications will be admitted to the final interview.</p> <p><b>60 points</b> for the interview (included <b>10 points</b> for language skills).</p>
Assessment: Interview	<p>The interview will focus on the scientific interests and the motivation of candidates. They will be asked to present their proposal for the development of the submitted research project. Candidates will illustrate purposes, methodologies, timing for implementation, and any critical issues. During the interview, the following aspects will be assessed: a sound scientific background related to the PhD course topics; methodological, research and lab skills; the knowledge of English language. The candidate may perform the competition in English language.</p>
Research project	<p>Prof. Pollegioni, Prof. Molla, Dott.ssa Rosini “Synthetic biology approaches in green chemistry”</p> <p>Prof. Montagnoli “Tree root functional traits in response to climate change: enhancing urban ecosystems resilience and biodiversity”</p>
Calendar:	<p>The interviews will take place on 11, 14 and if required by the number of candidates, 15 September 2023 at 10 am, in presence, with the possibility for foreign candidates (or those who are abroad) to request the remote connection.</p>
Assessable Qualifications:	<p>Curriculum vitae must be presented using the appropriate form which can be downloaded at the following link: <a href="https://www.uninsubria.it/files/cvtemplate2021docx">https://www.uninsubria.it/files/cvtemplate2021docx</a> Please note: <b>if submitted in any other form, the title will not be evaluated.</b></p> <p>The Curriculum vitae must be complete with: i) personal</p>



	data; ii) training path with the duration of the courses and the grades obtained; iii) previous research experiences, theses and publications produced.
	Self-certification or certification of the transcript of records of the Master's Degree with dates, marks, type of title, evaluation and final mark.
	Self-certification or certification of the transcript of records the Bachelor's Degree with date, type of title and final mark.
	For Students awaiting the attainment of the Master's Degree: self-certification or certification of the transcript of records of the Master's curriculum with dates and marks.
	Abstract of the Master Thesis
	Publications
	Any other useful qualification such as: specialization and postgraduate courses, awards, grants, teaching activities, PhD titles, collaboration to research activities.