



Public Competition for Admission to Doctoral Research Programmes at the University of Milan a.y. 2021/2022.

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PUBLIC COMPETITION FOR ADMISSION TO DOCTORAL RESEARCH PROGRAMMES AT THE UNIVERSITY OF MILAN - A.Y. 2021/2022.

THE RECTOR

- having regard to Italian Ministerial Decree No. 270, dated 22 October 2004, entitled "Amendments to Regulation No. 509 containing rules governing the educational autonomy of Universities, passed by a Decree of the Ministry for Universities and Scientific and Technological Research on 3 November 1999";
- having regard to Article 4 of Italian Law No. 210, dated 3 July 1998, as amended by art. 19, paragraph 1, of Italian Law No. 240 dated 30 December 2010;
- having regard to Italian Regional Law No. 33, dated 13 December 2004, entitled "Rules governing Regional measures to ensure the right to study at university", which makes provisions for services in favour of students enrolled in doctoral programmes;
- having regard to Italian Ministerial Decree No. 45 dated 8 February 2013, "Regulation containing the accreditation methods of the locations and doctoral programmes and the criteria for the institution of doctoral programmes by accredited bodies";
- having regard to the Statute of the University of Milan, issued through Rectoral decree on 15 March 2012, as amended;
- having regard to the University Regulations regarding research doctorates issued by Rector's decree of 5 June 2015, as amended;
- having regard to the Ministerial decrees protocol no. 555 of 28 August 2020, protocol no. 808 of 28 November 2018, and protocol no. 917 of 15 October 2019, whereby the Ministry of Education, Universities and Research (MUR), pursuant to Ministerial Decree 45/2013, grants five-year accreditation to the doctoral research programmes proposed by the University of Milan, subject to compliance with the prescribed requirements;
- having regard to the fact that for the 2021/2022 academic year the University intends to institute a new cycle of doctoral programmes;
- having regard to the note of Ministry of Universities and Research (MUR) protocol no. 7403 of 16 March 2021;
- having regard to the decisions of the Academic Senate and of the Board of Directors in the sessions of 16 and 30 March 2021, concerning institution of the 37th doctoral cycle;

HEREBY DECREES



Art. 1 - Institution of Doctoral Research Programmes

The following doctoral research programmes, subject to accreditation by MUR and checks to verify that accreditation requirements have been maintained, are instituted at the University of Milan for academic year 2021/2022 (37th cycle)

- Biologia molecolare e cellulare - Molecular and cellular biology
- Chimica - Chemistry
- Chimica industriale - Industrial chemistry
- Diritto comparato, privato, processuale civile e dell'impresa - Comparative, private and civil procedural law
- Informatica - Computer Science
- International and public law, ethics and economics for sustainable development - LEES
- Medicina sperimentale - Experimental medicine
- Scienze ambientali - Environmental sciences
- Scienze del patrimonio letterario, artistico e ambientale - Literature, arts and environmental heritage
- Scienze della nutrizione - Nutritional sciences
- Scienze della Terra - Earth sciences
- Scienze farmaceutiche - Pharmaceutical sciences
- Scienze giuridiche "Cesare Beccaria" - Legal studies "Cesare Beccaria"
- Scienze per i sistemi alimentari - Food systems
- Scienze per la sanità pubblica - Public Health Sciences
- Scienze veterinarie e dell'allevamento - Veterinary and animal science
- Studi sulla criminalità organizzata - Studies on Organized Crime

Public competitions for admission to the above doctoral research programmes, based on qualifications and exams, are hereby announced by the University of Milan; the tables annexed to this decree, which are an integral part of this document, contain a brief description of the programmes, the examination window and the links to the university website where the research topics identified by the academic board of each programme, in line with the objectives of the programme, its research and educational focus, can be found. The criteria on which the selection of research topics is based are indicated in art. 21 of the University Regulations for doctoral study.

The number of scholarships may be increased should external funding become available before the deadline of the call for submission of applications.



Foreign candidates who are in receipt of scholarships issued by their country of origin may be admitted in excess of the enrolment quota if they pass the admission exams set out in this decree.

Art. 2 - Admission requirements

In order to apply for a place in the doctoral research programmes, students must have a second cycle degree, an equivalent qualification, or an equivalent qualification by study level (*Master's Degree*) from a foreign University.

The suitability of the foreign academic qualifications in terms of content is appraised by the Examining Committee of each doctoral programme, in compliance with the regulations in force in Italy and in the country in which the academic qualification was issued, and the international treaties or agreements pertaining to the conferment of qualifications for the continuation of studies.

Those without a second cycle degree may also apply, but admission to the doctoral research programme is subject to completing the second cycle degree by 31 October 2021, failing which they will be excluded from the programme.

Art. 3 - Application for admission

Applications must be submitted through the following procedure by no later than **2 pm on 1st September 2021**:

1. register onto the [the University portal](#). This operation is not required of those already registered on the portal or in possession of University access credentials (graduands or those who graduated from the University of Milan less than a year ago);
2. Login and submit an application for admission to the Doctoral programme admission services - [Servizio di ammissione dottorati di ricerca](#);
3. Pay a non-refundable fee of €50 for selection costs, within the deadline for admissions.

During the procedure applicants are required to **upload** the following **documents** as .pdf, .rtf or .jpg files, all under 10 MB:

- A. Diploma Supplement or Bachelor's/Master's diploma (or equivalent qualification obtained in Italy or abroad), with transcript of records. Upcoming graduates are required to submit a certificate of enrolment in lieu of the diploma. The documents must be in Italian, English, French, German or Spanish. This document is not required of graduates/upcoming graduates of the University of Milan since it will be acquired internally;
- B. CV, describing any professional experience and other qualifications held by the applicant;
- C. Research project (using [Form 1 attached hereto](#));
- D. Copy of passport (foreign applicants only);



- E. Any publications;
- F. Annex A.

Non-EU candidates residing abroad are also required to submit an online application for pre-enrolment through [University](#), in order to obtain a student visa.

The online application cannot be modified or supplemented with further documentation once it has been confirmed.

It is possible to apply for any number of doctoral programmes, provided that the applicant registers properly for each, as described above, including payment of the non-refundable fee of €50 for each application submitted.

Self-certifications are accepted in the cases and in accordance with the methods provided for by the laws in force.

Failure to submit any one of the above-mentioned documents (from A to C) will lead to exclusion from the competition.

Qualifications and scientific publications may be submitted in Italian or English.

In addition to the above documentation, on request by the academic board and as specified in the programme tables, applicants must provide one or more reference letters, drafted according to Form 2 attached hereto, from qualified persons who have had a role in their education. The reference letters in .pdf must be e-mailed directly by said persons to the email address indicated in the section regarding the relevant doctoral programme by the competition deadline. In any case candidates may include reference letters written as indicated above with their application. Reference letters are considered part of the candidate's curriculum and no point score is assigned to them.

Art. 4 - Candidates with disabilities

In order to ensure equal treatment of candidates, those holding a certificate of invalidity and/or of disability pursuant to Law 104/1992 may apply for accommodations to the COSP Disability Office (ausili.ammissioni@unimi.it) attaching the certificate issued by the competent public health office. Candidates holding outdated certificates are required to apply for an updated certificate, to be submitted after enrolment for the purposes of using disability accommodations as offered by the study programme.

Art. 5 - Candidates with SLD

In order to ensure equal treatment of candidates, those holding a Specific Learning Disorder (SLD) certificate issued by the National Health Service, a private affiliated centre, or a private specialist (with a compliance certificate from the competent health authority), pursuant to Law 170/2010, may apply for accommodations to the COSP SLD Office (ausili.ammissioni@unimi.it)



attaching the certificate. If the SLD was diagnosed in childhood, and the certificate is over three years old, students should apply for an updated certificate, to be submitted after enrolment for the purposes of using SLD accommodations as offered by the study programme.

Art. 6 - Admission exam

Admission to the doctoral programmes is through a public selection procedure involving the evaluation of qualifications and tests for the comparative assessment of candidates. An Examining Committee set up and appointed in compliance with current regulations will carry out the procedure.

The selection procedure aims to ascertain the qualifications, capacity and aptitudes of candidates for scientific research and their personal motivations. It is based on assessment of the **CV**, a **research project**, which may be inspired by the work of the second cycle degree thesis, and an **online interview**. The research project, which should be drafted using a standard model ([Form 1 attached hereto](#)), is only for selection purposes and does not limit the choice of doctoral thesis in the case of admission.

The CV and research project are assessed before the interview. The outcome of the assessment is available on the University portal.

The CV is evaluated on the basis of the candidate's university studies, publications, professional experience and other qualifications, if any. A **maximum score of 20 points** can be assigned to the CV. In assigning the points the committees consider the statistical distribution of exam grades for the study programme courses, as well as the conditions and the period over which the candidate has obtained his/her qualifications.

A maximum of 10 points can be assigned to the **research project**.

Candidates who obtain a score of at least 50% of the maximum points obtainable for the CV and the research project can be called for interview.

The interview is public; the date will be posted to the University portal following the assessment of qualifications. The aim is to verify the candidate's knowledge of the field of the doctorate. The interview includes a seminar-style presentation of the research project, followed by general discussion to verify the candidate's expertise, scientific qualities and motivations. A maximum of 70 points may be assigned to the interview.

The interview is conducted in the language indicated in the doctoral programme table, but candidates may ask to be interviewed in English. Anyway, English language proficiency will be assessed during the interview.

To sit for the tests, candidates must show one of the following identity documents: identity card; passport; driving licence (Italian).

The outcome of the tests will be communicated by the Committee at the end of the interview.



At the end of the tests, the Committee draws up a general ranking list according to the total score assigned to the candidates for their CV, research project and interview. **Candidates must obtain a minimum score of 70/100 to pass the admission exam.**

The ranking is published online on the [Postgraduate admission rankings page](#) in the days following the examinations.

The Committees must conclude their work no later than **20 September 2021**.

Art. 7 - Admission to the programmes

Applicants are admitted to the programmes according to their position in the ranking list until the number of places available for each doctoral programme has been filled. Where applicants achieve the same score, preference will be given to the younger applicant, with the exception of the right of priority criterion for doctoral grants set forth in art. 9 of this call for applications. The rankings of eligible applicants will be published in the days following the interviews on the University website [Postgraduate admission rankings page](#).

The ranking posted to the University website is equivalent to a notice. Therefore, admitted candidates will receive no written notice.

Applicants admitted to the programmes lose their entitlement if they fail to enrol by the deadline. Their place is then given to the next applicant in the ranking list. This also applies if an admitted applicant withdraws within three months of the beginning of the programme. If the withdrawing student has already received any monthly scholarship payments, he/she is required to return them. Takeover applicants will be contacted personally by email by the Doctoral Students Administration Office (*Segreteria Dottorati*), which will provide instructions and deadlines for enrolment.

Applicants ranked in more than one list can only choose one doctoral programme.

Art. 8 - Enrolment

Applicants admitted to doctoral programmes can enrol online **from 27 September 2021 to 2pm on 1st October 2021** using the [SIFA enrolment service](#) and following the procedures published on the [University website](#).

Upcoming graduates admitted to a PhD programme may not use the online enrolment service. They will have to download, print and fill out the enrolment form available on the website and submit it through the [InformaStudenti](#) service > Postgraduate > Doctoral research (PhD) by the enrolment deadline.

Upon graduation, to be achieved by 31 October 2021, the student will be required to notify the office by submitting a self-certification form through the [InformaStudenti](#) service. The form can be downloaded from the website of the student's University of origin



Candidates are admitted conditionally and may be excluded from the programme if they do not meet the requirements.

Students enrolled on PhD programmes are required to pay the regional tax for education of € 140.00 and a stamp duty of € 16.00 annually. These amounts are deducted from the grant amount.

Those who give up the grant and foreign students who are recipients of grants awarded by their home country are required to pay an annual course admission and attendance fee of € 980.00, including regional tax and stamp duty.

Applicants with an invalidity equal to or greater than 66%, and/or with a disability pursuant to Law 104/92, may apply for a tuition and regional tax waiver. These students are only required to pay a €16.00 stamp duty.

Students who withdraw from the doctoral programme are not entitled to reimbursement of enrolment fees already paid.

Candidates holding a qualification obtained abroad are required to upload the following documents when completing the online enrolment process:

- Original diploma (Master of Science or equivalent) with a translation into Italian, French, English, German or Spanish;
- Italian tax ID code.

To complete enrolment, the following documents must be sent to the International Students Office, through the [Informastudenti](https://www.unimi.it/en/study/student-services/welcome-desk-informastudenti) service, (<https://www.unimi.it/en/study/student-services/welcome-desk-informastudenti>) **by 29 October**:

- Statement of Validity (*Dichiarazione di Valore in Loco*) issued by the Italian Embassy, or Diploma Supplement, or certificate of comparability issued by CIMEA, or other declaration of validity issued by ENIC_NARIC centres;
- Student visa (only for non-EU citizens residing abroad);
- Valid residence permit (only for non-EU citizens).

Verification of the validity of foreign qualifications is made on submission of the official documents. Until then, candidates are admitted to the programme conditionally, and may drop off the ranking if they are found not to meet the requirements.

Art. 9 - Scholarships

The scholarship is granted, in accordance with and by the methods established by existing regulations, in line with the ranking list and consists of an annual gross sum of **€16,350.00**. The amount of the scholarship is exempt from IRPEF income tax in accordance with art. 4 of Italian Law no. 476 of 13 August 1984 but subject to social security contributions pursuant to



article 2, paragraph 26 et seq., of Italian Law no. 335 of 8 August 1995 and subsequent amendments.

In the event of equal merit, the scholarships are assigned on the basis of the candidates' economic situation, as expressed by the indicator of equivalent economic situation (ISEE).

The regional study tax and a stamp duty will be deducted from the scholarship for a total sum of €156.00.

Scholarships have a yearly duration and are renewed if the Teaching Board promotes the doctoral student to the following year on the basis of yearly performance.

Starting from the second year, in addition to the scholarship and depending on the University's budgeted financial resources, each doctoral student is given an amount for research in Italy and abroad suited to the type of programme and in any case not less than 10% of the amount of the scholarship itself.

Art. 10 - Obligations of Doctoral Students

The doctoral research programmes entail 1500 hours of training-education and research activities per year. The duties and rights of students are set out in art. 22 of the University Regulations on doctoral research.

Art. 11 - Awarding of Qualification

The qualification of Doctor of Philosophy, abbreviated as "Dott. Ric" or "PhD", is awarded under the conditions indicated in art. 23 of the University Regulations on Doctoral Research.

Art. 12 - Processing of personal data

Pursuant to Legislative Decree no. 196 of 30 June 2003, as amended by Legislative Decree no. 101 of 10 August 2018, as well as EU Regulation no. 679/2016 (General Data Protection Regulation, GDPR) the University undertakes to safeguard the confidential nature of the information provided by applicants; all data provided is processed solely for purposes related to the competition and possibly for managing the applicant's relationship with the University, in compliance with current legislation.

Art. 13 - Relevant regulations

Any items for which no specific provision has been made in this call for applications are regulated in accordance with Italian legislation and regulations governing doctoral research.

Art. 14- Person in charge of the procedure and contacts

Pursuant to Law no. 241 of 7 August 1990, the person in charge of the present competition is dott.ssa Monica Delù (Head of Postgraduate Admissions and Student Public Relations Office).



UNIVERSITÀ DEGLI STUDI DI MILANO

For further information please use the [Informastudenti](#) service, selecting the category: Postgraduates/Doctoral research students.

Milan, 28 June 2021

THE RECTOR
(Elio Franzini)



Doctoral Programme in Molecular and Cell Biology

Learning Objectives

The doctoral programme aims to:

- train scientific experts with excellent skills in the field of biomolecular sciences and biotechnology;
- promote a molecular approach to the study of complex biological problems in model organisms (prokaryotic and eukaryotic microorganisms, animals and plants);
- encourage collaboration between research institutes, advanced training schools and companies in the fields of biomolecular sciences and biotechnology;
- encourage internationalisation by promoting international scientific collaborations, involving foreign lecturers, recruiting postgraduate students from abroad, and organising co-tutored dissertations involving study periods abroad.

Training activities will be characterised by:

- a multidisciplinary approach;
- interactivity;
- links to the business world;
- internationalisation.

A key element of the programme is the direct involvement of doctoral students in experimental research activities. Students will work full-time on a research project, providing critical insight and suggestions, and thereby acquiring scientific and organisational independence.

The programme is entirely in English.

Academic disciplines

01/B (Computer Science)

02/D (Applied physics, teaching and history of physics)

05/A (Plant Biology)

05/B (Animal Biology and Anthropology)

05/D (Physiology)

05/E (Experimental and Clinical Biochemistry and Molecular Biology)

05/F (Applied Biology)

05/G (Experimental and Clinical Pharmaceutical Sciences)

05/H (Human Anatomy and Histology)

05/I (Genetics and Microbiology)

06/A (Pathology and Laboratory Diagnostics)



Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

13

Scholarships

8 University of Milan

2 funded by the Department of Biosciences for the projects:

- Study of the Huntingtin protein structure/function relationship;
- Mechanisms of funny/HCN4 channel long-term regulation in health and disease;

2 scholarships for the Department of Biosciences project funded by MIUR as part of the *Bando Dipartimenti di Eccellenza 2018-2022*, pursuant to Law no. 232 dated 11 December 2016.

1 funded by Fondazione Istituto Nazionale di Genetica Molecolare (INGM) for the project: "MADE IN FAMILY: The impact of Maternal Anxiety-DEpression and ImmuNoinflammation on Foetus brAin growth and infant neurodevelopment. An iMagingeplgenetic Longitudinal study".

Doctoral programme coordinator

Prof. Martin Kater, full professor in scientific-disciplinary sector BIO/18 martin.kater@unimi.it

Admission requirements

Academic qualifications obtained in one of the following classes under Ministerial Decree 270/2004, or one of the corresponding classes under Ministerial Decree 509/99:

LM-6 Biology,

LM-7 Agricultural Biotechnology, LM-8 Industrial Biotechnology,

LM-8 Industrial Biotechnology,

LM-9 Medical, Veterinary and Pharmaceutical Biotechnology,

LM-11 Conservation and Restoration of Cultural Heritage,

LM-13 Pharmacy and Industrial Pharmacy,

LM-17 Physics,

LM-18 Computer Science,

LM-21 Biomedical Engineering,



LM-22 Chemical Engineering,
LM-25 Automation Engineering,
LM-26 Security Engineering,
LM-31 Engineering Management,
LM-32 Computer Engineering,
LM-35 Environmental and Land Engineering,
LM-40 Mathematics,
LM-41 Medicine and Surgery,
LM-42 Veterinary Medicine,
LM-44 Mathematical and Physical Modelling for Engineering,
LM-46 Dentistry and Dental prosthetics,
LM-47 Organisation and Management of Services for Sports and Exercise,
LM-48 Regional, Urban and Environmental Planning,
LM-51 Psychology,
LM-52 International Relations,
LM-53 Materials Science and Engineering,
LM-54 Chemistry,
LM-56 Economics,
LM-58 Universe Sciences,
LM-59 Public and Corporate and Advertising and Communication,
LM-60 Natural Sciences,
LM-61 Nutrition,
LM-66 Informatics Security,
LM-67 Science and Techniques of Preventive and Adapted Motor Activities,
LM-68 Sports Sciences and Technology,
LM-69 Agricultural Sciences and Technology,
LM-70 Food Science and Technology,
LM-71 Industrial Chemistry,
LM-73 Forestry and Environmental Science and Technology,
LM-74 Geological Sciences and Technology,
LM-75 Environment and Land Science and Technology,
LM-76 Environmental and Cultural Economics,
LM-78 Philosophy,



LM-79 Geophysics,
LM-82 Statistics,
LM-86 Zootechnics and animal technology,
LM-91 Techniques and Methods for Information Society,
LM-92 Communication Theory,
LM-93 E-learning and Media Education Theories and Approaches,
LM/SNT1 Nursing and Midwifery,
LM/SNT2 Rehabilitation Professions,
LM/SNT3 Health Professions for Technical Assistance,
LM/SNT4 Preventive Care Professions

Doctoral programme selection phases - Molecular and Cell Biology

Qualification assessment date

The assessment will take place from 8 to 9 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2021.

All candidates will have the interview in English. The research project will be illustrated through a Powerpoint presentation. Each candidate will have a 10-minute slot.

Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Chemistry

Learning objectives

The doctoral programme aims to train students in the critical analysis of scientific research problems in the field of chemistry, and to provide them with the skills required to identify and pursue important research objectives. The programme is designed to develop professionals who will be able to work in industry, in private and public institutions, and in academia.

Students will acquire all the knowledge and working methods necessary to carry out research activities to very high scientific standards in any of the numerous interdisciplinary fields of Chemistry. The central role of Chemistry in modern life is widely acknowledged today. This field of science intersects with several other scientific disciplines (such as physics and biology) and therefore finds application in many different fields, from medicine to nanomaterials, from agriculture to energy, from biology to electronics, from cultural heritage conservation to environmental protection. The input of advanced chemical research is essential in many other scientific disciplines and for the development of production in modern countries.

Doctoral programmes in Chemistry are offered in the following lines of research:

1. Synthesis, reactivity, reaction mechanisms, catalysis;
2. Structural chemistry, spectroscopic analysis;
3. Theoretical and computational chemistry;
4. Solid-state, interphase and electrolyte chemistry,
5. Chemistry of biologically active compounds, food and natural substances, biocatalysis;
6. Chemistry of the environment and of cultural heritage;
7. Chemistry of materials, chemistry for nanotechnologies, supramolecular chemistry, chemistry for energy.

An important aspect of the programme is that students meet foreign researchers and come into contact with internationally renowned research institutes. To this end, a significant part of teaching activities is assigned to foreign lecturers and students are given the opportunity to spend time in research institutions abroad.

The doctoral programme is entirely in English.

Academic disciplines

03/A (Analytical, chemical-physical)

03/B (Inorganic, technological)

03/C (Organic, industrial)

03/D (Pharmaceutics, Technology, Food)



Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

9

Scholarships

9 University of Milan

Doctoral programme coordinator

Prof. Emanuela Licandro, full professor in scientific-disciplinary sector CHIM/06
emanuela.licandro@unimi.it

Admission requirements

All classes of Master's degrees.

Reference letters

The academic board requires that two reference letters, drawn up according to [Form 2](#) attached hereto, be sent by email to the doctoral programme coordinator.

Doctoral programme selection phases - Chemistry

Qualification assessment date

The assessment will take place on 8 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2021.
The interview can be in Italian or English, at the candidate's choice. English language proficiency will be assessed anyway.
Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.
Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Industrial Chemistry

Learning objectives

The general theme of the doctoral programme relates to the extensive field of application of chemistry to industrial processes. It aims to train students in understanding theoretical and practical problems, as well as economic, environmental and safety issues. Graduates will possess considerable scientific expertise and be able to organise and manage research activities, as well as analyse the aspects pertaining to variations in scale. The main research areas are: physical chemistry and catalysis in industrial processes; industrial electrochemistry and corrosion; synthesis, properties and structure of polymers; synthesis and processes of fine chemistry; synthesis, processes and control in primary chemistry; chemical biotechnology; innovative chemical processes; new structural and functional materials; innovative energy technologies; nanotechnologies.

An important aspect of the programme is that students meet foreign researchers and come into contact with internationally renowned research institutes. To this end, some teaching activities are assigned to foreign lecturers and students are given the opportunity to spend time in research institutions abroad.

The programme is entirely in English.

Academic disciplines

03/A (Analytical, chemical-physical)

03/B (Inorganic, technological)

03/C (Organic, industrial)

09/D (Chemical and Material Engineering)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

5

Scholarships

5 University of Milan



Doctoral programme coordinator

Prof. Dominique Roberto, full professor in scientific-disciplinary sector CHIM/03
dominique.roberto@unimi.it

Admission requirements

All classes of Master's degrees.

Reference letters

The academic board requires that two reference letters, drawn up according to [Form 2](#) attached hereto, be sent by email to the doctoral programme coordinator.

Doctoral programme selection phases - Industrial Chemistry

Qualification assessment date

The assessment will take place on 8 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2021.

The interview can be in Italian or English, at the candidate's choice. English language proficiency will be assessed anyway.

Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Comparative, Private, Civil Procedural and Business Law

Learning objectives

The programme aims to promote scientific debate among experts who give the programme an interdisciplinary character while (given the links between the scientific sectors involved) providing a common perspective, so that discussion among jurists of differing competencies is fruitful and rich. Its main objective is that of adequately structuring and linking research training activities, focusing on comparative law with the aim of intensifying scientific debate among those studying private law, business law (in its two forms, commercial/industrial and occupational) and civil procedural law. Special attention is given to the formation of students in the methodological aspects of scientific research. The affinities among the various areas of legal studies addressed by the programme will allow for in-depth discussion during lecture series on cross-sector topics. As in the past, authorities in the field will be involved and collaborations with universities and foreign researchers will be intensified.

Academic disciplines

12/A (Private law)

12/B (Commercial and labour law)

12/E (International, European Union, comparative, economic, market and maritime law)

12/F (Civil procedural law)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

6

Scholarships

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Doctoral programme coordinator

Prof. Giuseppe Ludovico, associate professor in scientific-disciplinary sector IUS/07
giuseppe.ludovico@unimi.it

Curricula

1. Private Law
2. Comparative Law



3. Commercial and industrial Law
4. Labour Law
5. Civil procedural Law

Admission requirements

Academic qualifications awarded in class LMG/01 Law (under Ministerial Decree 270/2004) or in one of the corresponding classes under Ministerial Decree 509/99.

Doctoral programme selection phases - Comparative, Private, Civil Procedural and Business Law

Qualification assessment date

The assessment will take place on 8 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2021.

The interview can be in Italian or English, at the candidate's choice. English language proficiency will be assessed anyway.

Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Computer Science

Learning objectives

The doctoral programme in Computer Science aims to provide students with advanced scientific, methodological and technological knowledge in computer science and related sectors and their corresponding fields of application. This knowledge will prepare students and introduce them to theoretical and applied research, with particular attention to interdisciplinarity and internationalisation, developing research skills so that they are able to produce original independent research of interest to the international scientific community and businesses.

The doctoral programme aims to provide students with:

- solid wide-ranging knowledge on the basics of science and methodologies and technologies pertinent to IT and related fields;
- advanced and in-depth skills in specific areas;
- interdisciplinary skills necessary to promote cultural and methodological synergies,
- sound knowledge of research methodologies and of how to organise and manage research and disseminate results;
- opportunities to train internationally;
- better training and placement within academic research groups and companies.

The programme is entirely in English.

Academic disciplines

01/B (Computer science)

09/H (Computer engineering)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

10

Scholarships

8 University of Milan



1 funded by the Fondazione Istituto Italiano di Tecnologia (IIT) for the project: “Study of online learning algorithms”.

1 funded by CARDIO CALM SRL for the project: “Comparative analysis and development of diagnostic algorithms for the identification of atrial arrhythmias from electrocardiographic signals using machine learning techniques”.

Doctoral programme coordinator

Prof. Paolo Boldi, full professor in scientific-disciplinary sector INF/01

paolo.boldi@unimi.it

Admission requirements

All classes of master’s degrees

Reference letters

The academic board requires that from 1 to 3 reference letters, drawn up according to [Form 2](#) attached hereto, be sent by email to phdcomputerscience@di.unimi.it

Doctoral programme selection phases - Computer Science

Qualification assessment date

The assessment will take place on 10 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2021.
The interview will be in English.
Exam procedures, the calendar with interview dates and times, and the title of the candidate’s project will be posted to the University website.
Online posting is equivalent to a notice to the persons concerned.



Doctoral programme in International and Public Law, Ethics and Economics for Sustainable Development (LEES)

Learning Objectives

Despite the urgency of the Sustainable Development Goals integrated into the 2030 Agenda for Sustainable Development, some of the most influential global actors continue to disclaim their responsibility to contribute to them. The magnitude of the problem justifies a multidisciplinary research program on the institutions for sustainability based on putting to work together law, ethics and economics - and to which the LEES doctorate is dedicated.

The legal system defines the rule of law limits to the political balance between fundamental rights and economic stability, and indicates the intolerability of phenomena of marginalization and inequality. However, new ideas of justice are needed: after redefining the concept social well-being, these ideas need to reconceive and understand distributive justice from both an inter-generational and intra-generational perspective.

Comparative studies, as well as *de jure condendo* ones, will design multi-level institutions for sustainable development, finally questioning that various private institutions can be sheltered from the claims of social justice, such as the access to innovation, the fair distribution of decision-making rights to stakeholders within enterprises, the democratic self-government of common goods.

Strategic litigation will be studied in order to promote institutional change and respect for human rights inside and outside the courts.

Economic analysis will set the condition to verify when institutional change is supported by collective rational choice models and if it corresponds, thanks also to plasticity of preferences, to the emergence of game theoretical equilibria eliciting conformity (social norms).

The doctoral programme will be in English.

Academic disciplines

12/C (Constitutional and ecclesiastical law)

12/D (Administrative and tax law)

12/E (International, European Union, comparative, economic, market and maritime law)

12/H (Roman law, history of medieval and modern law, and philosophy of law)

13/A (Economics)

13/B (Business Economics)



Partner Universities

University of Milan (administrative centre)

University of Maastricht

University of Rijeka

At the end of the programme, each partner University will grant the student the PhD qualification pursuant to Ministerial Decree no. 45 of 8 February 2013.

Research Topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

7, of which one to be set aside for an employee of public research institutes and centres in highly skilled positions (on paid leave).

Scholarships

6 scholarships for completing the Department of Italian and Supranational Public Law project funded by MIUR as part of the *Bando Dipartimenti di Eccellenza 2018-2022*, pursuant to Law no. 232 dated 11 December 2016.

Doctoral programme coordinator

Prof. Lorenzo Sacconi, full professor of economic policy in the SECS-P/02 scientific-disciplinary lorenzo.sacconi@unimi.it

Admission requirements

LM-1 Cultural anthropology and ethnology,

LM-16 Finance,

LM-48 Regional, Urban and Environmental Planning,

LM-49 Design and Management of Tourist Systems,

LM-50 Planning and Management of Educational Services,

LM-51 Psychology,

LM-52 International Relations,

LM-55 Cognitive science,

LM-56 Economics,



LM-59 Public and Corporate and Advertising and Communication,

LM-62 Political Sciences,

LM-63 Public Administration,

LM-64 Religious Studies,

LM-69 Agricultural Sciences and Technology,

LM-70 Food Science and Technology,

LM-73 Forestry and Environmental Science and Technology,

LM-75 Environment and Land Science and Technology,

LM-76 Environmental and Cultural Economics,

LM-77 Economics and business,

LM-78 Philosophy,

LM-81 Development Cooperation,

LM-84 History,

LM-87 Social services and policies,

LM-88 Sociology and social research,

LM-90 European studies,

LM-92 Communication Theory,

LM/SC Legal Sciences,

LMG/01 Law.

Reference letters

The academic board requires the presentation of one reference letter, to be drafted according to Form 2 attached hereto, to be sent by e-mail to lees@unimi.it

Doctoral programme selection phases - International and Public Law, Ethics and Economics for Sustainable Development (LEES)

<i>Qualification assessment date</i>	The assessment will take place on 9 September 2021. The assessment outcome will be posted to the University website by the interview start date.
<i>Interviews</i>	Online interviews will be held from 13 to 17 September 2021. The interview will be in English. Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.



Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Experimental Medicine

Learning objectives

Experimental medicine develops and applies technology and biological models for studying pathogenic mechanisms in human disease. It involves various disciplines (biochemistry, biology, molecular biology, anatomy, physiology, pathology, immunology, genetics and microbiology/virology) that are providing a rapidly growing understanding of the mechanisms that enable the development of pathological processes. The course aims to acquaint students with the technologies and research methodologies in the area of biomedicine and biotechnology based on *in vitro* and *in vivo* experimental models and '-omic' approaches, and on their application to the study of cellular and molecular mechanisms involved in the pathogenesis of human disease. The final objective is the formation of high-level scientists able to combine an understanding of biological processes and pathogenic mechanisms through the application of advanced experimental techniques. The programme's specific objectives are:

1. develop the ability to define problems and devise experiments to solve them in accordance with scientific standards;
2. study biochemical, molecular and cellular mechanisms in physiopathology using advanced technologies;
3. develop the ability to critically assess scientific literature;
4. provide solid, up-to-date knowledge in the specific field;
5. teach how to conduct independent research, and inform on related ethical implications.

The doctoral programme is conducted entirely in English.

Academic disciplines

05/E (Experimental and Clinical Biochemistry and Molecular Biology)

05/F (Applied Biology)

05/G (Experimental and Clinical Pharmacological science)

06/A (Pathology and Laboratory Diagnostics)

06/D (Specialised Clinical Medicine)

06/N (Healthcare, applied medical technology, physical exercise and sports science professions)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years



Places available

9

Scholarships

9 University of Milan

Doctoral programme coordinator

Prof. Nicoletta Landsberger, full professor in scientific-disciplinary sector BIO/11
nicoletta.landsberger@unimi.it

Admission requirements

All classes of master's degrees

Doctoral programme selection phases - Experimental Medicine

Qualification assessment date

The assessment will take place on 9 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2021.

The interview will be in English.

Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Environmental Sciences

Learning objectives

The doctoral programme provides solid grounding and training in research in the various fields typical of Environmental Sciences, promoting interdisciplinary interaction of students with Italian and foreign research groups and with institutions that, in various capacities, study and manage the environment, land and human health.

As a highly interdisciplinary programme, it aims to develop:

- an understanding of methodological, instrumental, analytical, and statistical approaches to study of the environment;
- the ability to draw together the interdisciplinary studies of environmental system components.

The programme ensures high standards of learning in the integrated study of complex environmental systems regarding:

- current and past biological and non-biological components;
- functional relations between the biotic and a-biotic components and mediating mechanisms;
- changes both in the times of ecological processes and of evolutionary and geomorphological processes.

The programme focuses on the following issues:

- biodiversity, at all levels of organization of living organisms;
- the relationships between the biotic components and between them and the abiotic environment, including in anthropogenic components;
- human-environment interactions, including diachronically, both in terms of the impact of anthropic activities on environmental systems and the effects of the environment on risks for humans and human activities.

We also aim to develop innovative methods for teaching environmental sciences.

Academic disciplines

01/A (Mathematics)

02/C (Astronomy, Astrophysics, Earth and Planetary Physics)

04/A (Geosciences)

05/A (Plant Biology)

05/B (Animal Biology and Anthropology)

05/C (Ecology)

05/G (Experimental and Clinical Pharmacological Sciences)

05/I (Genetics and Microbiology)



06/A (Pathology and laboratory diagnostics)

06/M (Public Health)

07/C (Agricultural, Forestry and Biosystem Engineering)

07/E (Agricultural Chemistry, Agricultural Genetics and Pedology)

07/G (Animal Sciences and Technologies)

07/H (Veterinary Medicine)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

7

Scholarships

7 University of Milan

Doctoral programme coordinator

Prof. Gentile Francesco Ficetola, full professor in scientific-disciplinary sector BIO/05
francesco.ficetola@unimi.it

Admission requirements

All classes of master's degrees

Doctoral programme selection phases - Environmental Sciences

Qualification assessment date

The assessment will take place on 9 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2021.

All candidates will have the interview in English. The research project will be illustrated through a Powerpoint presentation. Each candidate will have a 10-minute slot.



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Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Literature, Arts and Environmental Heritage

Learning objectives

The doctoral programme in Literature, arts and environmental heritage is structured around two central ideas: the “text” (broadly considered as the product of intentional creative action), its history and success, the forms of its production and reception; the “context” or overall historical and environmental circumstances in which production of the text takes place. The new structure issues from experience developed during previous doctoral programmes in Classical Antiquity, History of Italian language and Literature, Cultural and Environmental Heritage Sciences. The cultural contents typical of the various sectors (philology, literature and linguistics, history and classical antiquity, archaeology, history of art, of music and of performing arts, human environmental sciences) will be studied in depth, developed and reorganised in a multidisciplinary whole.

Academic disciplines

- 10/A (Archaeology)
- 10/B (Art History)
- 10/C (Music, Drama, Cinema, Television and Audiovisual Media)
- 10/D (Classical Antiquity)
- 10/E (Middle Latin and Romance Philologies and Literature)
- 10/F (Italian Studies and Comparative Literature)
- 10/G (Glottology and Linguistics)
- 10/N (Eastern and African Cultures)
- 11/A (Historical Disciplines)
- 11/B (Geography)
- 11/C (Philosophy)
- 11/E (Psychology)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

7



Scholarships

7 University of Milan

Doctoral programme coordinator

Prof. Patrizia Piacentini, full professor in scientific-disciplinary sector L-OR/02

patrizia.piacentini@unimi.it

Admission requirements

Academic qualifications obtained in one of the following classes under Ministerial Decree 270/2004, or one of the corresponding classes under Ministerial Decree 509/99:

LM-2 Archaeology,

LM-3 Landscape Architecture,

LM-5 Archive Studies and Librarianship,

LM-10 Conservation of Architectural and Environmental Heritage,

LM-11 Cultural Heritage Conservation,

LM-12 Design,

LM-14 Modern Philology,

LM-15 Philology, Literature and History of Classical Antiquity,

LM-19 Information and Editorial Systems,

LM-36 Languages and Literature of Africa and Asia,

LM-37 Modern European and American Languages and Literature,

LM-38 Modern Languages for International Communication and Cooperation,

LM-39 Linguistics,

LM-45 Musicology and Musical Heritage,

LM-48 Regional, Urban and Environmental Planning,

LM-49 Design and Management of Tourist Systems,

LM-50 Planning and Management of Educational Services,

LM-51 Psychology,

LM-65 Performance Arts and Multimedia Production,

LM-75 Environmental and Land Sciences and Technology,

LM-78 Philosophy,

LM-80 Geography,



LM-84 History,

LM-89 Art History,

LM-92 Communication Theory,

LM-94 Specialised Translation and Interpreting,

LMR/02 Conservation and Restoration of Cultural Heritage

Doctoral programme selection phases - Literature, Arts and Environmental Heritage

Qualification assessment date

The assessment will take place on 8 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2021.

The interview can be in Italian or English, at the candidate's choice. Anyway, all candidates will be assessed for English language proficiency.

Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Nutrition Sciences

Learning objectives

The Doctoral Programme in Nutrition Sciences (DSN) offers integrated multidisciplinary and translational training in Nutrition research. The programme intends to train students in research in multiple fields, including nutrition, medicine, food chemistry, biology and veterinary medicine. Specialty areas include human nutrition, diet therapy, nutraceuticals (including animal), foods and food production, well-being, community nutrition, and food education, as well as animal nutrition (also as a model) and food safety. Nutrition knowledge and skills are integrated synergistically, as part of an innovative and attractive training path.

Academic disciplines

- 03/D (Pharmaceutical, Technological, Nutritional)
- 05/D (Physiology)
- 05/E (Experimental and Clinical Biochemistry and Molecular Biology)
- 05/G (Experimental and Clinical Pharmacological Sciences)
- 06/A (Pathology and Laboratory Diagnostics)
- 06/B (General Clinical Medicine)
- 06/D (Specialised Clinical Medicine)
- 06/F (Integrated Clinical Surgery)
- 06/G (Clinical Paediatrics)
- 06/H (Clinical Gynaecology)
- 07/G (Animal Sciences and Technologies)
- 07/H (Veterinary Medicine)
- 11/E (Psychology)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

7



Scholarships

6 University of Milan

1 funded by the *Società OBM Ospedale dei Bambini Milano - Buzzi Onlus* for the project: “Dietary therapy in pediatric rare diseases and drug-resistant epilepsy”.

Doctoral programme coordinator

Prof. Luciano Pinotti, full professor in scientific-disciplinary sector AGR/18

luciano.pinotti@unimi.it

Admission requirements

All classes of master's degrees

Reference letters

The academic board requires that two reference letters, drawn up according to [Form 2](#) attached hereto, be sent by email to miriam.cordoni@unimi.it, cc to the doctoral programme coordinator.

Doctoral programme selection phases - Nutrition Sciences

Qualification assessment date

The assessment will take place on 10 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2020.

The interview can be in Italian or English, at the candidate's choice. Anyway, all candidates will be assessed for English language proficiency.

Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Earth Sciences

Learning objectives

The doctoral programme in Earth Sciences aims to train young researchers so that they are able to autonomously investigate a broad range of geoscience topics. The mission is to form high profile geologists with scientific-technical-experimental training in the study, modelling and management of georesources who are able to solve problems effectively. Based on past experience, the programme will focus on immediately marketable hard & soft skills and meet the need for post-graduate education with up-to-date, innovative know-how. In particular, it will provide advanced specialist training

1. in basic, applied and theoretical research on problems relating to the structure, composition, evolution and dynamics of the Earth;
2. in the characterisation and modelling of the Earth System;
3. in basic and applied research on land use, natural hazards, energy and water resources, geomaterials, mineral prospecting and enhancement of cultural heritage.

The geological perspective of the overall functioning of the Earth System includes research centred on the processes at work on the surface and inside the Earth, on their impact on ecosystems and human activities and, conversely, the short and long-term consequences of human activity on the environment. The complex interactions between geosphere, biosphere, atmosphere and hydrosphere are stored in the geological record, which can be decoded to:

- a) reconstruct the development and evolution of our planet, combining experimental observations and models;
- b) Define natural resources (oil, gas, mineral raw materials, water), their use and sustainable exploitation;
- c) Evaluate geological hazards (e.g., earthquakes, volcanic eruptions, floods, landslides);
- d) Devise works of geological engineering and infrastructures;
- e) Implement environmental reclamation technologies;
- f) Develop exploitation of raw materials for industrial applications;
- g) Preserve and make the most of our cultural geo-paleontological heritage;
- h) Evaluate forensic applications.

The EARTH SYSTEM: PROCESSES AND MODELLING curriculum aims to develop scientific-technical skills for understanding, quantifying and modelling the current Earth System and the geological record, characterised by complex interactions between Geosphere, Biosphere, Atmosphere and Hydrosphere.

The GEORESOURCES curriculum aims to develop innovative skills to address the global challenges deriving from the growing need for Georesources. Research activities will focus on a wide spectrum of geological skills regarding the identification and exploitation of energy, mineral and



water resources while preserving the landscape. The aim is to train high-profile geologists with scientific-technical-experimental training for research, modelling and management of georesources and for studying and enhancing the landscape and cultural heritage.

The programme is organised to meet teaching and research requirements related to the broad spectrum of geosciences. The lines of research developed during the doctoral programme in Earth Sciences are highly topical with extensive international significance, as witnessed by close cooperation with leading international research institutions. Special attention is dedicated to training researchers to tackle complex research topics in an independent and innovative manner. Training of doctoral students includes short courses and workshops, work experience in Italian and international institutions/laboratories, collaboration with industry, participation in Italian and international conferences and workshops, and other activities focused on overall training.

The programme is entirely in English

Academic disciplines

04/A (Geosciences)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

8

Scholarships

5 University of Milan

3 scholarships for the Department of Biosciences project funded by MIUR as part of the *Bando Dipartimenti di Eccellenza 2018-2022*, pursuant to Law no. 232 dated 11 December 2016.

Doctoral programme coordinator

Prof. Fernando Camara Artigas, full professor in scientific-disciplinary sector GEO/06
fernando.camara@unimi.it

Curricula

1. Earth System: Processes and Modelling
2. Georesources



Admission requirements

Academic qualifications obtained in one of the following classes under Ministerial Decree 270/2004, or one of the corresponding classes under Ministerial Decree 509/99:

- LM-11 Science for conservation of cultural heritage,
- LM-17 Physics,
- LM-18 Computer Sciences,
- LM-22 Chemical Engineering,
- LM-23 Civil Engineering,
- LM-27 Telecommunications Engineering,
- LM-29 Electronic Engineering,
- LM-30 Energy and Nuclear Engineering,
- LM-32 Computer Engineering,
- LM-34 Naval Engineering,
- LM-35 Environmental and Land Engineering,
- LM-40 Mathematics,
- LM-48 Regional, Urban and Environmental Planning,
- LM-53 Materials Science and Engineering,
- LM-54 Chemistry,
- LM-58 Universe Sciences,
- LM-60 Natural Sciences,
- LM-69 Agricultural Science and Technology,
- LM-71 Industrial Chemistry,
- LM-72 Navigation Science and Technology,
- LM-73 Forestry and Environmental Science and Technology,
- LM-74 Geological Sciences and Technologies,
- LM-75 Environmental and Land Sciences and Technology,
- LM-79 Geophysics,
- LM-82 Statistical Sciences.



Reference letters

The academic board requires that one reference letter, drawn up according to [Form 2](#) attached hereto, be sent by email to the doctoral programme coordinator.

Doctoral programme selection phases - Earth Sciences

Qualification assessment date

The assessment will take place on 7 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 10 to 17 September 2021.

The interview will be in English.

Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Pharmaceutical Sciences

Learning objectives

The doctoral programme is designed to train highly skilled doctors to work successfully in the industrial and academic fields, and in the sector of medicines and healthcare products. The training, which aims at providing advanced methodological knowledge and scientific content in the pharmaceutical sector, includes theory and research, both centred on the design, synthesis, development and control of new biologically active compounds, new pharmaceutical forms, special foods, cosmetics, biocides and medical devices, typical of the fields covered in the doctoral programme:

- Design and synthesis of biologically active compounds
- Pharmaceutical, biopharmaceutical and toxicological analysis
- Metabolism of medicines and pharmacokinetics
- Pharmaceutical technology and legislation
- Chemistry of foods and dietary products
- Fermentation biotechnology and chemistry
- Advanced methods of synthesis
- Chemical-physical characterisation of products with biological activity
- Medicinal plants and active ingredients of plant origin
- Statistical methods for experimental data processing in the chemical analysis laboratory.

The doctoral programme is entirely in English.

Academic disciplines

03/A (Analytical, chemical-physical)

03/B (Inorganic, technological)

03/C (Organic, industrial)

03/D (Pharmaceutical, technological, nutritional)

05/A (Plant biology)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years



Places available

7

Scholarships

6 University of Milan

1 funded by *Istituto di Scienze e Tecnologie Chimiche “Giulio Natta” SCITEC-CNR* for the project “Development of click chemistry hydrogels with applications in biosensing”.

Doctoral programme coordinator

Prof. Giancarlo Aldini, full professor in scientific-disciplinary sector CHIM/08
giancarlo.aldini@unimi.it

Admission requirements

Academic qualifications obtained in one of the following classes under Ministerial Decree 270/2004, or one of the corresponding classes under Ministerial Decree 509/99:

LM-6 Biology,

LM-8 Industrial Biotechnology,

LM-9 Medical, Veterinary and Pharmaceutical Biotechnology,

LM-13 Pharmacy and Industrial Pharmacy,

LM-21 Biomedical Engineering,

LM-22 Chemical Engineering,

LM-26 Security Engineering,

LM-53 Materials Science and Engineering,

LM-54 Chemistry,

LM-61 Nutrition,

LM-69 Agricultural Science and Technology,

LM-70 Food Science and Technology,

LM-71 Industrial Chemistry.

Reference letters

The academic board requires that one reference letter, drawn up according to [Form 2](#) attached hereto, be sent by email to the doctoral programme coordinator and to the address dottorato.scifarm@unimi.it.



Doctoral programme selection phases - Pharmaceutical Sciences

Qualification assessment date

The assessment will take place on 8 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2021.

The interview can be in Italian or English, at the candidate's choice. Anyway, all candidates will be assessed for English language proficiency.

Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Legal Studies “Cesare Beccaria”

Learning objectives

The programme provides high-level interdisciplinary training during which the doctoral student is offered the possibility of further study of law, with special reference to criminal law and procedure, Roman law, history, philosophy and sociology of law, and ecclesiastic and canon law.

The programme includes lessons and active participation at seminars, during which the PhD candidate will be encouraged to research different topics in detail. He/she will also be involved in research projects promoted by the Board of Lecturers and will be urged to write and publish contributions in the framework of these projects.

During the three-year period, the student will write an original scientific paper under the supervision of one or more tutors. The paper may be interdisciplinary.

A number of courses and seminars may be conducted in English. Part of the programme may also be conducted at a foreign university or research institute.

Academic disciplines

12/C (Constitutional and ecclesiastical law)

12/G (Criminal law and procedure)

12/H (Roman law, history of medieval and modern law, and philosophy of law)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

7

Scholarships

6 University of Milan



1 funded by the Department of Legal studies "Cesare Beccaria" for the project: "Big data and law in the digital transformation of the city, citizens, minors and patients".

Doctoral programme coordinator

Prof. Claudio Luzzati, full professor in scientific-disciplinary sector IUS/20
claudio.luzzati@unimi.it

Curricula

1. Criminal law and procedure
2. Roman law and history of law
3. Philosophy and sociology of law, ecclesiastic and canon law

Admission criteria

Academic qualifications obtained in one of the following classes under Ministerial Decree 270/2004, or one of the corresponding classes under Ministerial Decree 509/99:

LM-18 Computer Science,

LM-32 Computer Engineering,

LM-52 International Relations,

LM-56 Economics,

LM-62 Political Sciences,

LM-63 Public Administration,

LM-66 Informatics Security,

LM-78 Philosophy,

LM-81 Development Cooperation,

LM-84 History,

LM-88 Sociology and social research,

LMG/01 Law.

Doctoral programme selection phases - Legal Studies "Cesare Beccaria"

Qualification assessment date

The assessment will take place on 10 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2021.



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The interview can be in Italian or English, at the candidate's choice. English language proficiency will be assessed anyway.

Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Food Systems

Learning objectives

The aim of this doctoral programme is to prepare researchers and scholars specialised in nutrition with international standard methodological know-how, autonomy and specific skills in scientific research on food systems. With these learning objectives, the doctoral programme in Food Systems envisages many cross-sector research topics:

- food technologies, process control and innovation;
- microbiology of foods and bioprocesses;
- food chemistry and biochemistry;
- human nutrition;
- ecology of agri-food and agri-environmental systems.

The doctoral programme is held entirely in English.

Academic disciplines

- 03/A (Analytical, Chemical-Physical)
- 03/D (Pharmaceutical, Technological, Nutritional)
- 05/D (Physiology)
- 05/E (Experimental and Clinical Biochemistry and Molecular Biology)
- 06/D (Specialised Clinical Medicine)
- 07/A (Agricultural Economics and Rural Surveying)
- 07/C (Agricultural, Forestry and Biosystem Engineering)
- 07/D (Entomology and Plant Pathology)
- 07/E (Agricultural Chemistry and Genetics and Pedology)
- 07/F (Food Science and Technologies)
- 07/I (Agricultural microbiology)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years



Places available

6

Scholarships

6 University of Milan

Doctoral programme coordinator

Prof. Antonella Pagliarini, full professor in scientific-disciplinary sector AGR/15
ella.pagliarini@unimi.it

Curricula

1. Chemistry and biochemistry
2. Agri-environment
3. Food Science and Nutrition

Admission requirements

All classes of master's degrees

Doctoral programme selection phases - Food Systems

Qualification assessment date

The assessment will take place on 9 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2021.

The interview will be in English.

Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Public Health Sciences

Learning objectives

The doctoral programme in Public Health Sciences aims to form researchers who are able to design, undertake and critically interpret research and advanced training projects and to assess health status and prevent the spread of transmittable and chronic-degenerative diseases within the population; promote health in individuals and populations; disseminate scientific culture and applicable research methodologies.

The internationalisation process foresees the exchange of students and professors with doctoral students, research centres and foreign institutions and the organisation of courses held by foreign experts.

The specific objectives of the doctoral programme include the development of research methodologies in the area of health, both laboratory and clinical; in the area of prevention policies focusing on the public and on particular groups at risk; in the context of services to the population for protecting and promoting individual health; in a transversal and transdisciplinary context that recognizes that the health of a populations is closely linked to that of animals and the environment ('one health' approach) and acquisition of a solid methodological grounding in the quantitative disciplines required to correctly apply and develop methods for the critical interpretation of basic, clinical, medical and epidemiological research findings.

Academic disciplines

06/E (Specialised Clinical Surgery)

06/G (Clinical Paediatrics)

06/H (Clinical Gynaecology)

06/M (Public Healthcare)

07/H (Veterinary Medicine)

13/B (Business Economics)

13/D (Statistics and mathematical methods for decision-making)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

4



Scholarships

4 University of Milan

Doctoral programme coordinator

Prof. Carlo La Vecchia, full professor in scientific-disciplinary sector MED/01
carlo.lavecchia@unimi.it

Admission requirements

All classes of master's degrees

Reference letters

The academic board requires that one reference letter, drawn up according to [Form 2](#) attached hereto, be sent by email to chiara.padovese@unimi.it.

Doctoral programme selection phases - Public Health Sciences

Qualification assessment date

The assessment will take place on 8 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 10 to 17 September 2021.

The interview can be in Italian or English, at the candidate's choice. Anyway, all candidates will be assessed for English language proficiency.

Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Veterinary and Animal Science

Learning objectives

The learning objectives of the doctoral programme are:

1. Coordinate third-level education for all disciplines under the umbrella of Veterinary Science and Animal Production;
2. Provide young graduates with a solid scientific and cultural education in the relevant disciplines through the development of advanced research programmes and highly qualifying specialized training;
3. Take advantage of the close network of collaborations and agreements currently in place between the promoting professors and the production and business systems operating in the sectors mentioned above;
4. Take part in the numerous ongoing collaborations with other distinguished national and international research institutions for advanced education in specific areas and use the increased critical mass and multidisciplinary approach to favour the development of new, more systematic collaborations;
5. Take up every opportunity to promote internationalization through the involvement of professors and students from abroad in its training and research.

The programme is entirely in English.

Academic disciplines

05/E (Experimental and Clinical Biochemistry and Molecular Biology)

07/A (Agricultural Economics and Rural Surveying)

07/C (Agricultural, Forestry and Biosystem Engineering)

07/G (Animal Science and Technology)

07/H (Veterinary Medicine)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

12



Scholarships

12 University of Milan

Doctoral programme coordinator

Prof. Valeria Grieco, associate professor in scientific-disciplinary sector VET/03
valeria.grieco@unimi.it

Admission requirements

All classes of master's degrees

Reference letters

The academic board requests two reference letters drawn up using [Form 2](#) attached hereto and emailed to phdcourse.vas@unimi.it

Doctoral programme selection phases - Veterinary and Animal Science

<i>Qualification assessment date</i>	The assessment will take place on 8 September 2021. The assessment outcome will be posted to the University website by the interview start date.
<i>Interviews</i>	Online interviews will be held from 13 to 17 September 2021. The interview will be in English. Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website. Online posting is equivalent to a notice to the persons concerned.



Doctoral Programme in Studies on Organized Crime

Learning objectives

The doctoral programme in Studies on Organized Crime aims to fulfil the need for highly specialized individuals in a field of such complexity and importance that new scientific know-how, as well as professional profiles and sensibilities, are required. It also aims to provide students with the knowledge (in sociology, history, law, economics, etc.) required to identify, define and contrast manifestations of organized crime, even within the scope of prevention, on the basis of sound theoretical foundations and appropriate methodological approaches.

Academic disciplines

- 11/A (History)
- 12/C (Constitutional and ecclesiastical law)
- 12/D (Administrative and tax law)
- 12/E (International, European Union, comparative, economic, market and maritime law)
- 12/G (Criminal law and procedure)
- 12/H (Roman law, history of medieval and modern law, and philosophy of law)
- 13/B (Commercial and labour law)
- 13/C (Economic History)
- 13/D (Statistics and mathematical methods for decision-making)
- 14/A (Political theory)
- 14/B (Political History)
- 14/C (Sociology)
- 14/D (Applied sociology)
- 01/B (Computer Science)

Research topics

Research topics may be viewed on the [University website](#)

Duration

3 years

Places available

5, of which one to be set aside for an employee of public research institutes and centres in highly skilled positions (on paid leave).



Scholarships

4 University of Milan

Doctoral programme coordinator

Prof. Fabio Basile, full professor in scientific-disciplinary sector IUS/17

fabio.basile@unimi.it

Admission criteria

All classes of master's degrees

Reference letters

The Teaching committee requires that one reference letter, drawn up according to [Form 2](#) attached hereto, be sent by email to monica.massari@unimi.it

Doctoral programme selection phases - Studies on Organized Crime

Qualification assessment date

The assessment will take place on 10 September 2021.
The assessment outcome will be posted to the University website by the interview start date.

Interviews

Online interviews will be held from 13 to 17 September 2021.

The interview can be in Italian or English, at the candidate's choice. English language proficiency will be assessed anyway.

Exam procedures, the calendar with interview dates and times, and the title of the candidate's project will be posted to the University website.

Online posting is equivalent to a notice to the persons concerned.

Annex A

DICHIARAZIONE SOSTITUTIVA DI ATTO NOTORIO

Self-drafted affidavit
(art. 47 del DPR n° 445/2000)
(art. 47 Presidential Decree no. 445/2000)

Il sottoscritto/the undersigned

cognome/surname _____ nome/name _____

nato a/born in _____ il/on _____

consapevole delle sanzioni penali richiamate dall'articolo 76 del Dpr 445/2000 in caso di
dichiarazioni non veritiere e falsità in atti
aware that making false statements and submitting false documents are crimes punishable by law
(articles 75 and 76 of the Presidential Decree no. 445/2000)

**dichiara sotto la propria personale responsabilità
declares under his/her own responsibility**

che le pubblicazioni/ i titoli sotto elencati, prodotti in copia tramite upload, sono conformi
all'originale:

that the publications and the qualifications listed below, produced as copies, comply with the
originals:

Milan, _____

Data/date

Firma/Signature

Ai sensi dell'art. 3 del DPR 445/2000 l'autocertificazione può essere utilizzata solo dai cittadini appartenenti all'Unione Europea. I cittadini non europei devono produrre documenti originali o in copia autenticata secondo la normativa vigente.

Pursuant to art. 3 of Presidential Decree no. 445/2000, only EU citizens are entitled to use this form. Non-EU citizens must submit the original documentation or photocopies authenticated in compliance with the laws in force.

Form 1

PROGETTO DI RICERCA / RESEARCH PROJECT

Cognome e nome del candidato Applicant's Full Name	
Corso di dottorato PhD	

1) Titolo del progetto / Project title

2) Sommario / Abstract

3) Obiettivi e rilevanza dei risultati ottenibili nel contesto dello stato dell'arte / Project aims and their relevance in the context of the state of the art

4) Descrizione del progetto / project description

5) Bibliografia / References

Il progetto dovrà avere almeno 2.000 e non più di 4.000 parole, bibliografia esclusa.

The project should have at least 2,000 and no more than 4,000 words, excluding references.

Form 2

REFEREE FORM

Applicant's Name		PhD	
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To be completed in all areas

Referee's name		Position/Title	
Institution/Company			
Address		City	
Zip code		Country	
Phone contact		Email	
Date			

On the following scale, please rank the applicant against other students in comparable fields and indicate the comparison group used.

Bottom 50%	Top 50%	Top 25%	Top 10%	Top 5%	Top 2%

Please rate this applicant in overall promise for the doctorate (check one)

Unable to evaluate	Below Average	Average	Good	Outstanding	Exceptional

Give your comments here
(Your personal evaluation about the candidate)
