PhD programme in Agriculture, environment and bioenergy

Scholarships and research topics

- **3 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R10/1</td>
<td>Selection of new vine rootstocks resistant to abiotic stress for eco-sustainable viticulture.</td>
<td>Dr. Lucio Brancadoro</td>
<td>Vinevolution business network</td>
</tr>
<tr>
<td>R10/2</td>
<td>Biotechnological approaches for genetic improvement of resistance to biotic and abiotic stress in fruit tree species.</td>
<td>Prof. Marco Cirilli</td>
<td>CRPV Soc. Coop. Plant Production Research Center</td>
</tr>
<tr>
<td>R10/3</td>
<td>Economic, environmental and precision viticulture models.</td>
<td>Dr. Stefano Corsi, Dr. Chiara Mazzocchi</td>
<td>Arnaldo Caprai Società agricola Srl</td>
</tr>
</tbody>
</table>

**Duration**

3 years

**Doctoral Programme Coordinator**

Prof. Piero Attilio Bianco, full professor, subject area AGR/12

[pietro.bianco@unimi.it](mailto:pietro.bianco@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/1 (Cultural anthropology and ethnology)
- LM/2 (Archeology)
- LM/3 (Landscape architecture)
- LM/6 (Biology)
- LM/7 (Agricultural biotechnology)
- LM/8 (Industrial biotechnology)
- LM/9 (Medical, veterinary and pharmaceutical biotechnology)
- LM/11 (Cultural heritage conservation studies)
- LM/17 (Physics)
- LM/18 (Computer science)
- LM/26 (Safety engineering)
LM/30 (Energy and nuclear engineering)
LM/32 (Computer engineering)
LM/33 (Mechanical engineering)
LM/35 (Environmental engineering)
LM/40 (Mathematics)
LM/42 (Veterinary medicine)
LM/44 (Mathematical and physical modelling in engineering)
LM/48 (Urban and environmental planning)
LM/53 (Materials science and engineering)
LM/56 (Economics)
LM/60 (Natural sciences)
LM/69 (Agricultural science and technology)
LM/70 (Food science and technology)
LM/73 (Forestry and environmental science and technology)
LM/74 (Geological science and technology)
LM/75 (Environment and land science and technology)
LM/76 (Economics for the environment and culture)
LM/77 (Business management)
LM/81 (Development co-operation)
LM/82 (Statistics)
LM/86 (Livestock management)

**PhD programme in Agriculture, environment and bioenergy - Selection process**

<table>
<thead>
<tr>
<th>Assessment of qualifications</th>
<th>Qualifications will be assessed on 10 November 2021. The outcome of the assessment will be available on the University website by the start date of the interviews.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews</td>
<td>Online interviews will take place on 12 and/or 15 November 2021. The interview will be in English. The interview date and time for each candidate will be posted to the University website. Such posting is equivalent to notice to the candidate.</td>
</tr>
</tbody>
</table>
PhD programme in Molecular and Cellular Biology

Scholarships and research topics

- **5 scholarships** on GREEN issues

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R11/1</td>
<td>Genomic approaches to the study of medicinal plant species biodiversity conservation.</td>
<td>Prof. Martin Kater</td>
<td>Aboca Spa</td>
</tr>
<tr>
<td>R11/2</td>
<td>Ensuring plant fertility in a changing climate.</td>
<td>Prof. Lucia Colombo</td>
<td>Sequentia Biotech</td>
</tr>
<tr>
<td>R11/3</td>
<td>New antimicrobial peptides for sustainable agriculture.</td>
<td>Prof. Paolo Pesaresi</td>
<td>Isagro Spa</td>
</tr>
<tr>
<td>R11/4</td>
<td>Innovative plant reproduction strategies to ensure food production in changing climatic conditions.</td>
<td>Prof. Lucia Colombo</td>
<td>KeyGene</td>
</tr>
<tr>
<td>R11/5</td>
<td>Improved rice yield: more food with less cultivated area.</td>
<td>Prof. Martin Kater</td>
<td>KeyGene</td>
</tr>
</tbody>
</table>

**Duration**

3 years

**Doctoral Programme Coordinator**

Prof. Roberto Mantovani, full professor, subject area BIO/18

roberto.mantovani@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/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 (Safety engineering)
LM/31 (Management engineering)
LM/32 (Computer engineering)
LM/35 (Environmental engineering)
LM/40 (Mathematics)
LM/41 (Medicine)
LM/42 (Veterinary medicine)
LM/44 (Mathematical and physical modelling in engineering)
LM/46 (Dental medicine)
LM/47 (Sport and leisure management)
LM/48 (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 (Advertising and communication for the public and private sectors)
LM/60 (Natural sciences)
LM/61 (Nutrition)
LM/66 (Informatics security)
LM/67 (Sport science for prevention and rehabilitation)
LM/68 (Sport science)
LM/69 (Agricultural science and technology)
LM/70 (Food science and technology)
LM/71 (Industrial chemistry)
LM/73 (Forestry and environmental science and technology)
LM/74 (Geological science and technology)
LM/75 (Environment and land science and technology)
LM/76 (Economics for the environment and culture)
LM/78 (Philosophical sciences)
LM/79 (Geophysics)
PhD programme in Molecular and Cellular Biology - Selection process

Assessment of qualifications

Qualifications will be assessed on 10 November 2021.

The outcome of the assessment will be available on the University website by the start date of the interviews.

Interviews

Online interviews will take place on 12 and/or 15 November 2021.

The interview will be in English.

The interview date and time for each candidate will be posted to the University website.

Such posting is equivalent to notice to the candidate.
PhD programme in Chemistry

Scholarships and research topics

- **4 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R12/1</td>
<td>Green Energy via Electrochemical Processes (GEEP).</td>
<td>Prof. Alberto Vertova</td>
<td>Claind Srl</td>
</tr>
<tr>
<td>R12/2</td>
<td>Enabling technologies-driven approach for new and sustainable synthesis of active pharmaceutical ingredients.</td>
<td>Prof. Alessandra Puglisi</td>
<td>Olon Spa</td>
</tr>
<tr>
<td>R12/3</td>
<td>Development of continuous biocatalytic processes for sustainable and low environmental impact production of high value-added molecules, including from renewable bio-resources.</td>
<td>Prof. Lucia Tamborini</td>
<td>Olon Spa</td>
</tr>
<tr>
<td>R12/4</td>
<td>Tools and Strategies for Green API (Active Pharmaceutical Ingredients) Manufacturing.</td>
<td>Prof. Daniele Passarella</td>
<td>Indena Spa</td>
</tr>
</tbody>
</table>

Duration
3 years

**Doctoral Programme Coordinator**
Prof. Daniele Passarella, full professor, subject area CHIM/06
daniele.passarella@unimi.it

**Admission requirements**
All master's degree classes.

**Reference letters**
The Academic Board requires that two reference letters, drawn up according to Form 2 attached hereto, be sent by email to the coordinator.
### PhD programme in Chemistry - Selection process

| Assessment of qualifications | Qualifications will be assessed on 10 November 2021.  
The outcome of the assessment will be available on the University website by the start date of the interviews. |
|---|---|
| Interviews | Online interviews will take place on 12 and/or 15 November 2021.  
The interview will be in Italian or English, as elected by the candidate. English language proficiency will be, anyway, assessed during the interview.  
The interview date and time for each candidate will be posted to the University website.  
Such posting is equivalent to notice to the candidate. |
## PhD programme in Industrial chemistry

### Scholarships and research topics

- **7 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R13/1</td>
<td>Metals &amp; Crystals.</td>
<td>Prof. Antonella Gervasini</td>
<td>A2A Spa</td>
</tr>
<tr>
<td>R13/2</td>
<td>Green electrochemistry for the circular recovery of critical raw materials from complex matrixes.</td>
<td>Prof. Alessandro Minguzzi</td>
<td>Bracco Spa</td>
</tr>
<tr>
<td>R13/3</td>
<td>Development of new methodologies and practices to reduce the environmental impact in the production of ceramic materials.</td>
<td>Prof. Claudia Bianchi</td>
<td>Graniti Fiandre Spa</td>
</tr>
<tr>
<td>R13/4</td>
<td>Preparation of bioactive peptides by enzymatic hydrolysis of high-protein food-industry waste.</td>
<td>Prof. Giovanna Speranza</td>
<td>Ilsa Spa</td>
</tr>
<tr>
<td>R13/5</td>
<td>Development and optimization of distillation processes in the recycling of polyamide plastic materials for eco-sustainable production of raw materials.</td>
<td>Prof. Carlo Pirola</td>
<td>Radici InNova Scarl(Radici Group)</td>
</tr>
<tr>
<td>R13/6</td>
<td>Innovation and optimization of hydrogen transport and distribution as a green and renewable energy vector.</td>
<td>Prof. Carlo Pirola</td>
<td>Regas Srl</td>
</tr>
<tr>
<td>R13/7</td>
<td>Apply ladder of chemical circularity: recycling of rare earth elements, from electronic waste to drugs.</td>
<td>Prof. Maurizio Benaglia</td>
<td>Chemessentia Srl</td>
</tr>
</tbody>
</table>

### Duration

3 years

### Doctoral Programme Coordinator

Prof. Dominique Roberto, full professor, subject area CHIM/03

dominique.roberto@unimi.it

### Admission requirements

All master's degree classes.
Reference letters

The Academic Board requires that two reference letters, drawn up according to Form 2 attached hereto, be sent by email to the coordinator.

PhD programme in Industrial chemistry - Selection process

<table>
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</tr>
</tbody>
</table>
PhD programme in Comparative, private and civil procedural law

Scholarships and research topics

- **3 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R42/1</td>
<td>Eco-sustainability and corporate governance.</td>
<td>Prof. Andrea Vicari, Prof. Andrea Tina</td>
<td>Crédit Agricole Italia Spa</td>
</tr>
<tr>
<td>R42/2</td>
<td>Corporate sustainability notice.</td>
<td>Prof. Matteo Rescigno, Prof. Emanuele Rimini</td>
<td>Crédit Agricole Italia Spa</td>
</tr>
<tr>
<td>R42/3</td>
<td>Circular economy, innovation and the precautionary principle. Between law and contractual models: the contribution of public and private entities to the ecological transition.</td>
<td>Prof. Chiara Tenella Sillani, Prof. Elisabetta Panzarini</td>
<td>Gianni &amp; Origoni Associate Law Firm - Department of Environmental Law</td>
</tr>
</tbody>
</table>

Duration

3 years

**Doctoral Programme Coordinator**

Prof. Giuseppe Ludovico, associate professor, subject area IUS/07

giuseppe.ludovico@unimi.it

**Admission requirements**

Qualifications in class LMG/01 Law (Ministerial Decree 270/2004), or in one of the corresponding classes pursuant to Ministerial Decree 509/99.

**PhD programme in Comparative, private and civil procedural law - Selection process**

**Assessment of qualifications**

Qualifications will be assessed on 10 November 2021.

The outcome of the assessment will be available on the University website by the start date of the interviews.

**Interviews**

Online interviews will take place on 12 and/or 15 November 2021.

The interview will be in Italian or English, as elected by the candidate. English language proficiency will be, anyway, assessed during the interview.

The interview date and time for each candidate will be posted to
the University website.

Such posting is equivalent to notice to the candidate.
PhD programme in Public, International and European Union Law

Scholarships and research topics

- **4 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R43/1</td>
<td>Public-private partnerships (’PPP’), with public or private initiative, with a focus on energy performance contracts (’EPC’).</td>
<td>Prof. Luca Bertonazzi, Prof. Wladimir Troise Mangoni</td>
<td>Engie Servizi Spa</td>
</tr>
<tr>
<td>R43/2</td>
<td>Water concessions for hydroelectric use: European Union guidelines, Italian legislation, the role of Regions and the rulings of the Constitutional Court.</td>
<td>Prof. Francesca Biondi, Prof. Luca Bertonazzi</td>
<td>A2A Spa</td>
</tr>
<tr>
<td>R43/3</td>
<td>Urban regeneration as a tool to promote sustainable development in a dual environmental and social perspective, in the light of the national and supranational regulatory framework.</td>
<td>Prof. Gaetano Ragucci, Prof. Diana Urania Galetta</td>
<td>Fondazione Banca del Monte di Lombardia</td>
</tr>
<tr>
<td>R43/4</td>
<td>The right to a healthy environment and the right to housing in social housing policies.</td>
<td>Prof. Luca Vanoni</td>
<td>&quot;Amministrativisti Associati&quot; Law Firm</td>
</tr>
</tbody>
</table>

**Duration**

3 years

**Doctoral Programme Coordinator**

Prof. Francesca Biondi, full professor, subject area IUS/08

[francesca.biondi@unimi.it](mailto:francesca.biondi@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/19 (Information and publishing systems)
- LM/38 (Languages and cultures for international communication and cooperation)
- LM/48 (Urban and environmental planning)
- LM/52 (International relations)
- LM/59 (Advertising and communication for the public and private sectors)
PhD programme in Public, International and European Union Law - Selection process

<table>
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</tbody>
</table>
PhD programme in Philosophy and human sciences

Scholarships and research topics

- **2 scholarships on INNOVATION issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R16/1</td>
<td>Digital devices and in vivo visualization.</td>
<td>Prof. Chiara Cappelletto</td>
<td>Next2U Srl</td>
</tr>
<tr>
<td>R16/2</td>
<td>Augmented skills. Augmented Reality and biomedics.</td>
<td>Prof. Andrea Pinotti</td>
<td>Transtec Services Srl</td>
</tr>
</tbody>
</table>

Duration

3 years

**Doctoral Programme Coordinator**

Prof. Andrea Pinotti, full professor, subject area M-FIL/04

[andrea.pinotti@unimi.it](mailto:andrea.pinotti@unimi.it)

**Admission requirements**

All master’s degree classes.

**PhD programme in Philosophy and human sciences - Selection process**

**Assessment of qualifications**

Qualifications will be assessed on 10 November 2021.

The outcome of the assessment will be available on the University website by the start date of the interviews.

**Interviews**

Online interviews will take place on 12 and/or 15 November 2021.

The interview will be in Italian or English, as elected by the candidate. English language proficiency will be, anyway, assessed during the interview.

The interview date and time for each candidate will be posted to the University website.

Such posting is equivalent to notice to the candidate.
Doctoral Programme in Physics, Astrophysics and Applied Physics

Scholarships and research topics

- **5 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R17/1</td>
<td>Development of energy efficient electrical power distribution architectures based on GaN and SiC devices.</td>
<td>Prof. Attilio Andreazza, Prof. Massimo Lazzaroni</td>
<td>Caen Spa</td>
</tr>
<tr>
<td>R17/2</td>
<td>Development of environmentally friendly active polymeric materials for the production of sensors and fluidic valves to be inserted in complex anatomical models for surgical experimentation without the use of animal models.</td>
<td>Prof. Paolo Milani</td>
<td>Dolphin Fluidics Srl</td>
</tr>
<tr>
<td>R17/3</td>
<td>SUN FORMULA SUstainable and Natural structurants for FORMULAted liquid products.</td>
<td>Prof. Giuliano Zanchetta</td>
<td>Procter &amp; Gamble West Chester</td>
</tr>
<tr>
<td>R17/4</td>
<td>Digital design of metamaterials for industry.</td>
<td>Prof. Stefano Zapperi</td>
<td>Elettrotecnica Rold Srl</td>
</tr>
<tr>
<td>R17/5</td>
<td>Imaging data FAIR-by-Design.</td>
<td>Prof. Giorgio Rossi</td>
<td>Exact-Lab Srl</td>
</tr>
</tbody>
</table>

**Duration**

3 years

**Doctoral Programme Coordinator**

Prof. Matteo Paris, full professor, subject area FIS/03

matteo.paris@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/11 (Cultural heritage conservation studies)
LM/17 (Physics)
Reference letters

The Academic Board requires that two reference letters, drawn up according to Form 2 attached hereto, be sent by email to phd@fisica.unimi.it

PhD programme in Physics, astrophysics and applied physics - Selection process

Assessment of qualifications

Qualifications will be assessed on 10 November 2021.

The outcome of the assessment will be available on the University website by the start date of the interviews.

Interviews

Online interviews will take place on 12 and/or 15 November 2021.

The interview will be in Italian or English, as elected by the
candidate. English language proficiency will be, anyway, assessed during the interview.

The interview date and time for each candidate will be posted to the University website.

Such posting is equivalent to notice to the candidate.
PhD programme in Computer science

Scholarships and research topics

- **3 scholarships on GREEN issues**

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<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R18/1</td>
<td>Mathematical optimization algorithms for electric vehicle routing.</td>
<td>Prof. Giovanni Righini</td>
<td>M.A.I.O.R. Srl</td>
</tr>
<tr>
<td>R18/2</td>
<td>Vision-based localization techniques and their application to assistive technologies.</td>
<td>Prof. Sergio Mascetti</td>
<td>Retina Italia Onlus</td>
</tr>
<tr>
<td>R18/3</td>
<td>Digital Twin for Reengineering Circular and Resilient Production Processes</td>
<td>Prof. Paolo Ceravolo</td>
<td>GE Avio Srl</td>
</tr>
</tbody>
</table>

Duration

3 years

Doctoral Programme Coordinator

Prof. Roberto Sassi, full professor, subject area INF/01
roberto.sassi@unimi.it

Admission requirements

All master's degree classes

Reference letters

The Academic Board requires that one to three reference letters, drawn up according to Form 2 attached hereto, be sent by email to phdcomputerscience@di.unimi.it

PhD programme in Computer science- Selection process

Assessment of qualifications

Qualifications will be assessed on 10 November 2021. The outcome of the assessment will be available on the University website by the start date of the interviews.

Interviews

Online interviews will take place on 12 and/or 15 November 2021. The interview will be in English. The interview date and time for each candidate will be posted to the University website. Such posting is equivalent to notice to the candidate.
PhD programme in International and Public Law, Ethics and Economics for Sustainable Development (LEES)

Scholarships and research topics

- 2 scholarships on GREEN issues

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R50/1</td>
<td>Promoting business and consumer engagement with the transition to green economy through verifiable standards based on multi-stakeholder interaction, and with a view to social inclusion and reputational effects.</td>
<td>Prof. Lorenzo Sacconi</td>
<td>UNI-ISO</td>
</tr>
<tr>
<td>R50/2</td>
<td>Cooperation for effective democratic governance of environmental common goods and for the production and distribution of public utilities according to criteria of sustainability, environmental justice and intergenerational equity.</td>
<td>Prof. Lorenzo Sacconi</td>
<td>UNIPOLIS Foundation</td>
</tr>
</tbody>
</table>

Partner universities

University of Milan (administrative office)
University of Maastricht
University of Rijeka

Duration

3 years

Doctoral Programme Coordinator

Prof. Lorenzo Sacconi, full professor, subject area SECS-P/02
lorenzo.sacconi@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/1 (Cultural anthropology and ethnology)
LM/16 (Finance)
LM/48 (Urban and environmental planning)
LM/49 (Tourism development and management)
LM/50 (Development and management of education services)
LM/51 (Psychology)
LM/52 (International relations)
LM/55 (Cognitive sciences)
LM/56 (Economics)
LM/59 (Advertising and communication for the public and private sectors)
LM/62 (Political science)
LM/63 (Public administration)
LM/64 (Religion)
LM/69 (Agriculture)
LM/70 (Food science)
LM/73 (Environmental and forestry sciences)
LM/75 (Environmental and land sciences)
LM/76 (Environmental and cultural economics)
LM/77 (Management)
LM/78 (Philosophy)
LM/81 (Development co-operation)
LM/84 (History)
LM/87 (Social services and policies)
LM/88 (Sociology and social research)
LM/90 (European studies)
LM/92 (Communication)
LM/SC-GIUR (Legal studies)
LMG/01 (Law)

Reference letters
The Academic Board requires that one reference letter, drawn up according to Form 2 attached hereto, be sent by email to lees@unimi.it

PhD programme in International and Public Law, Ethics and Economics for Sustainable Development (LEES) - Selection process

<table>
<thead>
<tr>
<th>Assessment of qualifications</th>
<th>Qualifications will be assessed on 10 November 2021. The outcome of the assessment will be available on the University website by the start date of the interviews.</th>
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</table>
Such posting is equivalent to notice to the candidate.
PhD programme in Experimental medicine

Scholarships and research topics

- 2 scholarships on INNOVATION issues

<table>
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<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R45/1</td>
<td>Preclinical and clinical development of a new regenerative medicine treatment for severe spinal cord injury.</td>
<td>Dr. Francesco Bifari, Prof. Massimo Locati</td>
<td>Hemera Srl</td>
</tr>
<tr>
<td>R45/2</td>
<td>Integrated studies of molecular biology, cellular biology and bioinformatics for identifying new treatments for Rett syndrome.</td>
<td>Prof. Nicoletta Landsberger</td>
<td>Genartis Srl</td>
</tr>
</tbody>
</table>

Duration

3 years

Doctoral Programme Coordinator

Prof. Nicoletta Landsberger, full professor, subject area BIO/11
nicoletta.landsberger@unimi.it

Admission requirements

All master's degree classes

Reference letters

The Academic Board requires that two reference letters, drawn up according to Form 2 attached hereto, be sent by email to phd.experimental-medicine@unimi.it

PhD programme in Experimental medicine - Selection process

Assessment of qualifications

Qualifications will be assessed on 10 November 2021.
The outcome of the assessment will be available on the University website by the start date of the interviews.

Interviews

Online interviews will take place on 12 and/or 15 November 2021.
The interview will be in English.
The interview date and time for each candidate will be posted to the University website.
Such posting is equivalent to notice to the candidate.
PhD programme in Translational medicine

Scholarships and research topics

- **3 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R46/1</td>
<td>Digital Biobank for Translational Medicine (D-B4MED) @ IEO.</td>
<td>Prof. Nicola Fusco</td>
<td>Life Reply, Business Unit of Santer Reply Spa</td>
</tr>
<tr>
<td>R46/2</td>
<td>Lifestyle (with a focus on physical exercise) as a tool for sustainability for the individual, the environment and society.</td>
<td>Prof. Daniela Lucini</td>
<td>Istituto Auxologico Italiano IRCCS</td>
</tr>
<tr>
<td>R46/3</td>
<td>Development of a semi-automatic three-dimensional cephalometric technique with reduced field of view and in augmented reality.</td>
<td>Prof. Chiarella Sforza</td>
<td>Orthosystem Milano Srl</td>
</tr>
</tbody>
</table>

- **1 scholarship on INNOVATION issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R46/4</td>
<td>Changes in care of HIV-infected patients in national Infectious Diseases centres following the Covid-19 epidemic and new therapeutic options.</td>
<td>Dr. Camilla Tincati</td>
<td>ViiV Healthcare Srl</td>
</tr>
</tbody>
</table>

Duration

3 years

**Doctoral Programme Coordinator**

Prof. Chiarella Sforza, full professor, subject area BIO/16

[chiarella.sforza@unimi.it](mailto:chiarella.sforza@unimi.it)

**Admission requirements**

All master’s degree classes

**PhD programme in Translational medicine - Selection process**

*Assessment of qualifications*  
Qualifications will be assessed on 10 November 2021.
The outcome of the assessment will be available on the University website by the start date of the interviews.

*Interviews*

Online interviews will take place on 12 and/or 15 November 2021.

The interview will be in English.

The interview date and time for each candidate will be posted to the University website.

Such posting is equivalent to notice to the candidate.
PhD programme in Mind, brain and reasoning

Scholarships and research topics

- **2 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R52/1</td>
<td>Representing Sustainability: foundations of an ontology of farm-to-fork food systems.</td>
<td>Prof. Andrea Borghini</td>
<td>IC Foods</td>
</tr>
<tr>
<td>R52/2</td>
<td>Green Minds: educational strategies for a plant-based diet in children 3-6 years old.</td>
<td>Prof. Andrea Borghini</td>
<td>Institut Paul Bocuse Research Center (IPBR)</td>
</tr>
</tbody>
</table>

**Duration**
3 years

**Doctoral Programme Coordinator**
Prof. Francesco Guala, full professor, subject area SECS-P/01

[francesco.guala@unimi.it](mailto:francesco.guala@unimi.it)

**Admission requirements**
All master's degree classes

**Reference letters**
The Academic Board requires that one reference letter, drawn up according to Form 2 attached hereto, be sent by email to [phd.mbr@unimi.it](mailto:phd.mbr@unimi.it)

**PhD programme in Mind, brain and reasoning - Selection process**

*Assessment of qualifications*
Qualifications will be assessed on 10 November 2021.
The outcome of the assessment will be available on the University website by the start date of the interviews.

*Interviews*
Online interviews will take place on 12 and/or 15 November 2021.
The interview will be in English.
The interview date and time for each candidate will be posted to the University website.
Such posting is equivalent to notice to the candidate.
PhD programme in Clinical research

Scholarships and research topics

- 3 scholarships on GREEN issues

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R47/1</td>
<td>Development of biodegradable thin-film wearable sensors for the detection of molecules in saliva in normal and pathological conditions</td>
<td>Prof. Gianluca Tartaglia</td>
<td>Micerium Spa</td>
</tr>
<tr>
<td>R47/2</td>
<td>Development of biodegradable on-site 3D-printed orthodontic aligners.</td>
<td>Prof. Alberto Caprioglio</td>
<td>Ki Group Srl</td>
</tr>
<tr>
<td>R47/3</td>
<td>Analysis of the effects of air and electromagnetic pollution on the prevalence of obesity and diabetes.</td>
<td>Prof. Livio Luzi</td>
<td>MultiMedica</td>
</tr>
</tbody>
</table>

Duration

3 years

Doctoral Programme Coordinator

Prof. Massimo Del Fabbro, associate professor, subject area MED/50
massimo.delfabbro@unimi.it

Admission requirements

1) Master’s degree in Medicine (LM-41). Moreover, applicants must i) have completed a postgraduate medical programme or ii) be enrolled in the last year of a postgraduate medical programme of the University of Milan for academic year 2021/2022.
2) Master’s degree in Dental medicine (LM-46).

Reference letters

The Academic Board requires that one reference letter, drawn up according to Form 2 attached hereto, be sent by email to the coordinator.

PhD programme in Clinical research - Selection process

*Assessment of qualifications* Qualifications will be assessed on 10 November 2021.

The outcome of the assessment will be available on the University website by the start date of the interviews.

*Interviews* Online interviews will take place on 12 and/or 15 November
The interview will be in English.

The interview date and time for each candidate will be posted to the University website.

Such posting is equivalent to notice to the candidate.
PhD programme in Environmental sciences

Scholarships and research topics

- **6 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R24/1</td>
<td>Bees, biodiversity and climate change.</td>
<td>Prof. Giulietta Minozzi</td>
<td>Nuova Genetica Italiana Srl</td>
</tr>
<tr>
<td>R24/2</td>
<td>Multifunctional assessment and validation of innovative practices, tools and models for landscape-agroecological management of agricultural systems: trade-offs and synergies in the framework of ecosystem services.</td>
<td>Prof. Ilda Vagge</td>
<td>Polyculturae Agricultural Producers Association - Cascina dell'Angelo</td>
</tr>
<tr>
<td>R24/3</td>
<td>Food waste recycling: “zero-waste” strategies towards sustainable marine collagen-based biomaterials.</td>
<td>Prof. Michela Sugni</td>
<td>Tensive Srl</td>
</tr>
<tr>
<td>R24/4</td>
<td>Economy of lithium: from primary to secondary resource. Study of a recycling process from lithium batteries.</td>
<td>Prof. Stefano Trasatti</td>
<td>Engitec Technologies Spa</td>
</tr>
<tr>
<td>R24/5</td>
<td>Water economy: environmental sustainability analysis of the mineral water value chain.</td>
<td>Dr. Felice D'Alessandro</td>
<td>S. Pellegrino Spa (Levissima brand)</td>
</tr>
<tr>
<td>R24/6</td>
<td>Smart biosensors for agriculture 4.0.</td>
<td>Prof. Caterina La Porta</td>
<td>DNDG Srl</td>
</tr>
</tbody>
</table>

Duration

3 years

**Doctoral Programme Coordinator**

Prof. Gentile Francesco Ficetola, full professor, subject area BIO/05

[francesco.ficetola@unimi.it](mailto:francesco.ficetola@unimi.it)

**Admission requirements**

All master's degree classes

**PhD programme in Environmental sciences - Selection process**

*Assessment of qualifications*  
Qualifications will be assessed on 10 November 2021.
The outcome of the assessment will be available on the University website by the start date of the interviews.

**Interviews**

Online interviews will take place on 12 and/or 15 November 2021.

The interview will be in English.

The interview date and time for each candidate will be posted to the University website.

Such posting is equivalent to notice to the candidate.
PhD programme in Literature, arts and environmental heritage

Scholarships and research topics

- 1 scholarship on INNOVATION issues

<table>
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<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R26/1</td>
<td>A digital literary republic.</td>
<td>Dr. Stefano Ballerio</td>
<td>Ledizioni Srl</td>
</tr>
</tbody>
</table>

Duration

3 years

Doctoral Programme Coordinator

Prof. Fabrizio Slavazzi, full professor, subject area L-ANT/07
fabrizio.slavazzi@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 (Archeology)
LM/3 (Landscape architecture)
LM/5 (Library studies)
LM/10 (Conservation of environmental and architectural heritage)
LM/11 (Conservation and restoration of cultural heritage)
LM/12 (Design)
LM/14 (Modern philology)
LM/15 (Philology, literature and history of antiquity)
LM/19 (Information and publishing systems)
LM/36 (Asian and African languages and literature)
LM/37 (Modern American and European languages and literature)
LM/38 (Languages and cultures for international communication and cooperation)
LM/39 (Linguistics)
LM/45 (Musicology and musical heritage)
LM/48 (Urban and environmental planning)
LM/49 (Tourism development and management)
LM/50 (Development and management of education services)
LM/51 (Psychology)
LM/65 (Performing arts and multimedia productions)
LM/75 (Environment and land science and technology)
LM/78 (Philosophical sciences)
LM/80 (Geography)
LM/84 (History)
LM/89 (Art history)
LM/92 (Communication)
LM/94 (Interpreting and specialist translation)
LMR/02 (Conservation and restoration of cultural heritage)

PhD programme in Literature, arts and environmental heritage - Selection process

Assessment of qualifications
Qualifications will be assessed on 10 November 2021.
The outcome of the assessment will be available on the University website by the start date of the interviews.

Interviews
Online interviews will take place on 12 and/or 15 November 2021.
The interview will be in Italian or English, as elected by the candidate. English language proficiency will be, anyway, assessed during the interview.
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PhD programme in Nutritional sciences

Scholarships and research topics

- 3 scholarships on GREEN issues

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
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<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R27/1</td>
<td>Green platform for advanced therapies: development of cerebral organoids as specific, safe and sustainable experimental models for the study and treatment of neurodevelopmental diseases - (3Sgreen).</td>
<td>Prof. Gian Vincenzo Zuccotti</td>
<td>A3Cube Srl</td>
</tr>
<tr>
<td>R27/2</td>
<td>Influence of the environment and lifestyle on epigenetics: new approaches to study the Epigenome in the age of green (EpiGreen).</td>
<td>Prof. Gian Vincenzo Zuccotti</td>
<td>A3Cube Srl</td>
</tr>
<tr>
<td>R27/3</td>
<td>&quot;One nutrition&quot; - Studying animal nutrition not only in terms of competition, but also of synergies and complementarities that can contribute to optimal use of nutrients in the food chain. (OT6 From producers to consumers: a fair, healthy and environmentally friendly food system).</td>
<td>Prof. Luciano Pinotti, Prof. Alessio Scarafoni</td>
<td>ASSALZOO - Italian National Association of Animal Food Producers</td>
</tr>
</tbody>
</table>

Duration
3 years

Doctoral Programme Coordinator
Prof. Luciano Pinotti, full professor, subject area AGR/18
luciano.pinotti@unimi.it

Admission requirements
All master's degree classes
Reference letters

The Academic Board requires that two reference letters, drawn up according to Form 2 attached hereto, be sent by e-mail to miriam.cordoni@unimi.it, cc to the coordinator luciano.pinotti@unimi.it

PhD programme in Nutritional sciences - Selection process

<table>
<thead>
<tr>
<th>Assessment of qualifications</th>
<th>Qualifications will be assessed on 10 November 2021. The outcome of the assessment will be available on the University website by the start date of the interviews.</th>
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<tr>
<td>Interviews</td>
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</tbody>
</table>
PhD programme in Earth sciences

Scholarships and research topics

- **6 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R28/1</td>
<td>Treatments with resin injections in contaminated soils.</td>
<td>Prof. Tiziana Apuani</td>
<td>Geosec Srl</td>
</tr>
<tr>
<td>R28/2</td>
<td>Studying water resources in the area of the Bergamo valleys where there are karstified rocks serving as a key groundwater reservoir for the local community, with regard to resource availability, potential effects of climate change and any eventual resumption of metal mining activities (in particular lead and zinc).</td>
<td>Prof. Giovanni Pietro Beretta</td>
<td>Uniacque Spa</td>
</tr>
<tr>
<td>R28/3</td>
<td>Experimental and numerical analysis of the behaviour of thermo-active sheet piles with the dual function of ground support and exploitation of low enthalpy geothermal energy.</td>
<td>Prof. Francesco Cecinato</td>
<td>CRUX Engineering B.V.</td>
</tr>
<tr>
<td>R28/4</td>
<td>HydroGeosITe: The Italian hydro-geological-geophysical calibration site for hydrogeological applications of geophysical approaches (electrical, electromagnetic and seismic).</td>
<td>Prof. Gianluca Fiandaca</td>
<td>A2A Ciclo Idrico Spa</td>
</tr>
<tr>
<td>R28/5</td>
<td>MountainHydro.</td>
<td>Dr. Daniele Pedretti</td>
<td>A2A Ciclo Idrico Spa</td>
</tr>
<tr>
<td>R28/6</td>
<td>IPRaMa, Induced Polarization for Raw Materials.</td>
<td>Prof. Gianluca Fiandaca</td>
<td>Aarhus Geofisica Srl</td>
</tr>
</tbody>
</table>

Duration

3 years

**Doctoral Programme Coordinator**

Prof. Maria Iole Spalla, full professor, subject area GEO/03

[iole.spalla@unimi.it](mailto:iole.spalla@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/11 (Cultural heritage conservation studies)
LM/17 (Physics)
LM/18 (Computer science)
LM/22 (Chemical engineering)
LM/23 (Civil engineering)
LM/27 (Telecommunication engineering)
LM/29 (Electronic engineering)
LM/30 (Energy and nuclear engineering)
LM/32 (Computer engineering)
LM/34 (Naval engineering)
LM/35 (Environmental engineering)
LM/40 (Mathematics)
LM/48 (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)
LM/73 (Forestry and environmental science and technology)
LM/74 (Geological science and technology)
LM/75 (Environment and land science and technology)
LM/79 (Geophysics)
LM/82 (Statistics)

Reference letters

The Academic Board requires that one reference letter, drawn up according to Form 2 attached hereto, be sent by email to the coordinator.

PhD programme in Earth sciences - Selection process

Assessment of qualifications

Qualifications will be assessed on 10 November 2021.
The outcome of the assessment will be available on the University website by the start date of the interviews.

**Interviews**

Online interviews will take place on 12 and/or 15 November 2021.

The interview will be in English.

The interview date and time for each candidate will be posted to the University website.

Such posting is equivalent to notice to the candidate.
PhD in Pharmaceutical sciences

Scholarships and research topics

- **8 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R29/1</td>
<td>Nutraceutical enhancement of secondary metabolites of plant origin from waste products of Italian food chains.</td>
<td>Prof. Giancarlo Aldini</td>
<td>Distillerie Bonollo Umberto Spa</td>
</tr>
<tr>
<td>R29/2</td>
<td>New biocatalysts, isolated enzymes and/or non-pathogenic and food-grade micrograms/fungi, to be used for the synthesis of Active Pharmaceutical Ingredients (API) using highly selective and low environmental impact processes.</td>
<td>Prof. Marco De Amici</td>
<td>Dipharma Francis Srl</td>
</tr>
<tr>
<td>R29/3</td>
<td>Enhancement of the health beneficial properties of extracellular vesicles from food waste (ValVesca).</td>
<td>Dr. Carmen Lammi</td>
<td>Materias Srl</td>
</tr>
<tr>
<td>R29/4</td>
<td>Nature and &quot;green chemistry&quot; as key factors for the preparation of high-quality active ingredients for the pharmaceutical industry.</td>
<td>Prof. Maria Luisa Gelmi</td>
<td>Indena Spa</td>
</tr>
<tr>
<td>R29/5</td>
<td>Microalgae and cyanobacteria extracts and their applications as antimicrobial agents.</td>
<td>Prof. Giancarlo Aldini</td>
<td>L.G. Italia Srl</td>
</tr>
<tr>
<td>R29/6</td>
<td>Development of innovative film forming materials from food by-product waste materials for the design of filmable dosage form.</td>
<td>Prof. Paola Minghetti</td>
<td>IBSA Farmaceutici Italia Srl</td>
</tr>
<tr>
<td>R29/7</td>
<td>High-value hydroxy fatty acids from waste biomass using sustainable physical and chemical processes for obtaining biopolymers.</td>
<td>Prof. Cristiano Bolchi</td>
<td>Sipol Spa</td>
</tr>
<tr>
<td>R29/8</td>
<td>Production of green starch nanoparticles for the delivery of anti-infective agents.</td>
<td>Prof. Loris Rizzello</td>
<td>INGM (National institute of molecular genetics)</td>
</tr>
</tbody>
</table>
Duration
3 years

Doctoral Programme Coordinator
Prof. Giancarlo Aldini, full professor, subject area 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 (Safety 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 e-mail to dottorato.scifarm@unimi.it cc to the coordinator giancarlo.aldini@unimi.it

PhD programme in Pharmaceutical sciences - Selection process

<table>
<thead>
<tr>
<th>Assessment of qualifications</th>
<th>Qualifications will be assessed on 10 November 2021. The outcome of the assessment will be available on the University website by the start date of the interviews.</th>
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</tr>
</tbody>
</table>
during the interview.

The interview date and time for each candidate will be posted to the University website.

Such posting is equivalent to notice to the candidate.
PhD programme in Pharmacological biomolecular sciences, experimental and clinical

Scholarships and research topics

- 3 scholarships on GREEN issues

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R49/1</td>
<td>Toxicological approach to the selection of sustainable chemicals.</td>
<td>Prof. Marina Marinovich</td>
<td>esqLABS GmbH</td>
</tr>
<tr>
<td>R49/2</td>
<td>Promotion of Italian chestnut cultivation through the recycling of waste products with potential health effects for humans.</td>
<td>Prof. Mario Dell'Agli</td>
<td>EPO Srl</td>
</tr>
<tr>
<td>R49/3</td>
<td>Assessing healthy biological activities of compounds from vegetable agro-industrial biomasses, obtained and analyzed using innovative and sustainable processes.</td>
<td>Prof. Paolo Magni</td>
<td>BSN Srl</td>
</tr>
</tbody>
</table>

Duration

3 years

Doctoral Programme Coordinator

Prof. Giuseppe Danilo Norata, full professor, subject area BIO/14

danilo.norata@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/9 (Medical, veterinary and pharmaceutical biotechnology)
LM/13 (Pharmacy and industrial pharmacy)
LM/17 (Physics)
LM/18 (Computer science)
LM/21 (Biomedical engineering)
LM/41 (Medicine)
Refereces

The Academic Board requires that one reference letter, drawn up according to Form 2 attached hereto, be sent by e-mail to the coordinator danilo.norata@unimi.it and to dottorato.sfsc@unimi.it

PhD programme in Pharmacological biomolecular sciences, experimental and clinical - Selection process

**Assessment of qualifications**

Qualifications will be assessed on 10 November 2021.

The outcome of the assessment will be available on the University website by the start date of the interviews.

**Interviews**

Online interviews will take place on 12 and/or 15 November 2021.

The interview will be in English.

The interview date and time for each candidate will be posted to the University website.

Such posting is equivalent to notice to the candidate.
PhD programme in Legal studies “Cesare Beccaria”

Scholarships and research topics

- **2 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R41/1</td>
<td>Business risk mapping and virtuous policies in the prevention of environmental offenses.</td>
<td>Prof. Gian Luigi Gatta</td>
<td>Piomboleghe Srl</td>
</tr>
<tr>
<td>R41/2</td>
<td>Organizational model pursuant to Legislative Decree 231/2001 and environmental risk prevention: issues and perspectives.</td>
<td>Prof. Angela Della Bella</td>
<td>Riri SA</td>
</tr>
</tbody>
</table>

Duration

3 years

**Doctoral Programme Coordinator**

Prof. Claudio Luzzati, full professor, subject area IUS/20

claudio.luzzati@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/18 (Computer science)
LM/32 (Computer engineering)
LM/52 (International relations)
LM/56 (Economics)
LM/62 (Political science)
LM/63 (Public administration)
LM/66 (Informatics security)
LM/78 (Philosophical sciences)
LM/81 (Development co-operation)
LM/84 (History)
LM/88 (Sociology and social research)
LMG/01 (Law)
<table>
<thead>
<tr>
<th>PhD programme in Legal studies “Cesare Beccaria” - Selection process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessment of qualifications</strong></td>
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<tr>
<td>Qualifications will be assessed on 10 November 2021.</td>
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<td>The outcome of the assessment will be available on the University website by the start date of the interviews.</td>
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<tr>
<td><strong>Interviews</strong></td>
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<tr>
<td>The interview will be in Italian or English, as elected by the candidate. English language proficiency will be, anyway, assessed during the interview.</td>
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</table>
PhD programme in Mathematical sciences

Scholarships and research topics

- **2 scholarships on GREEN issues**

<table>
<thead>
<tr>
<th>Code</th>
<th>Research line</th>
<th>Supervisor</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>R32/1</td>
<td>Development of finite-element parallel solvers for the design of new generation wind turbines.</td>
<td>Prof. Simone Scacchi</td>
<td>Seva Srl</td>
</tr>
<tr>
<td>R32/2</td>
<td>Mathematical modelling and data analysis for the study of the impact of climate and environmental changes on the degradation of cultural heritage indoors and outdoors.</td>
<td>Dr. Stefania Ugolini, Dr. Daniela Morale</td>
<td>Arakne Srl</td>
</tr>
</tbody>
</table>

**1 scholarship on INNOVATION issues**

<table>
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<tbody>
<tr>
<td>R32/3</td>
<td>Digital technologies for mathematics educational innovation in an inclusive perspective: from teacher training to field research.</td>
<td>Dr. Laura Branchetti</td>
<td>Wonderful Education Srl - Future Education Modena (FEM)</td>
</tr>
</tbody>
</table>

**Duration**

3 years

**Doctoral Programme Coordinator**

Prof. Dario Paolo Bambusi, full professor, subject area MAT/07
dario.bambusi@unimi.it

**Admission requirements**

All master's degree classes

**Reference letters**

The Academic Board requires that one reference letter, drawn up according to Form 2 attached hereto, be sent by email to segrdott.mat@unimi.it
**PhD programme in Mathematical sciences - Selection process**

<table>
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PhD programme in Food systems

Scholarships and research topics

- **8 scholarships on GREEN issues**

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<tbody>
<tr>
<td>R34/1</td>
<td>Mitigation of environmental impact through sustainable packaging solutions and shelf-life optimization: the case of coffee.</td>
<td>Prof. Sara Limbo</td>
<td>Luigi Lavazza Spa</td>
</tr>
<tr>
<td>R34/2</td>
<td>Green sensors and smart services for the optimization of agri-food supply chains with a view to industry 4.0: improved production sustainability, business competitiveness and food waste reduction.</td>
<td>Prof. Riccardo Guidetti</td>
<td>Officina delle soluzioni Snc</td>
</tr>
<tr>
<td>R34/3</td>
<td>Improved grape press for sustainable wine production (grape press 4.0).</td>
<td>Dr. Daniela Fracassetti</td>
<td>Oenoitalia Srl</td>
</tr>
<tr>
<td>R34/4</td>
<td>Integrating milk and dairy products in healthy and sustainable food models (VALILAT).</td>
<td>Dr. Cristian Del Bo’</td>
<td>Parmalat Spa</td>
</tr>
<tr>
<td>R34/5</td>
<td>Integrated green strategies for waste management, recovery and recycling in a dairy farm.</td>
<td>Prof. Luisa Pellegrino</td>
<td>Parmalat Spa</td>
</tr>
<tr>
<td>R34/6</td>
<td>ECO-sustainable PACKaging MATerials for the food industry (ECOPACKMAT).</td>
<td>Prof. Stefano Farris</td>
<td>Fedrigoni Spa</td>
</tr>
<tr>
<td>R34/7</td>
<td>Bioprocesses to improve the sustainability of legume- and cereal-based foods.</td>
<td>Prof. Alessandra Marti</td>
<td>Soremartec Italia Srl</td>
</tr>
<tr>
<td>R34/8</td>
<td>Development of a Healthy and Green Multifunctional Cooking Appliance.</td>
<td>Prof. Ernestina Casiraghi</td>
<td>Whirlpool EMEA Spa</td>
</tr>
</tbody>
</table>

**Duration**

3 years

**Doctoral Programme Coordinator**

Prof. Diego Mora, full professor, subject area AGR/16

diego.mora@unimi.it
**Admission requirements**

All master's degree classes

**PhD programme in Food systems - Selection process**

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PhD programme in Public health sciences

Scholarships and research topics

- **2 scholarships on GREEN issues**

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<th>Code</th>
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<tbody>
<tr>
<td>R48/1</td>
<td>Non-invasive vagus nerve stimulation as an innovative treatment for chronic inflammation in non-communicable diseases.</td>
<td>Prof. Matteo Bonzini</td>
<td>Medigas Italia Srl</td>
</tr>
<tr>
<td>R48/2</td>
<td>Development of biotechnological methods for the rapid detection and characterization of microbial variants (viral and bacterial) of clinical-epidemiological relevance (drug-resistant mutants, resistance to natural or vaccine-induced immunity) by means of genomic, molecular and immunological approaches.</td>
<td>Prof. Gianguglielmo Zehender</td>
<td>Immunospark Srl</td>
</tr>
</tbody>
</table>

**Duration**

3 years

**Doctoral Programme Coordinator**

Prof. Carlo La Vecchia, full professor, subject area MED/01
carlo.lavecchia@unimi.it

**Admission requirements**

All master’s degree classes

**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.

**PhD programme in Public health sciences - Selection process**

**Assessment of qualifications**

Qualifications will be assessed on 10 November 2021.

The outcome of the assessment will be available on the University website by the start date of the interviews.
Online interviews will take place on 12 and/or 15 November 2021.

The interview will be in Italian or English, as elected by the candidate. English language proficiency will be, anyway, assessed during the interview.

The interview date and time for each candidate will be posted to the University website.

Such posting is equivalent to notice to the candidate.
PhD programme in Veterinary and animal science

Scholarships and research topics

- **8 scholarships on GREEN issues**

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<tbody>
<tr>
<td>R35/1</td>
<td>Innovative technologies for food sanitation to support the ecological transition in the dairy industry.</td>
<td>Prof. Roberto Villa</td>
<td>WAXY Srl SB</td>
</tr>
<tr>
<td>R35/2</td>
<td>One health approach to antibiotic resistance: the role of companion animals in the spread of antibiotic-resistant bacterial strains.</td>
<td>Dr. Stefania Lauzi</td>
<td>PRIMA Lab SA</td>
</tr>
<tr>
<td>R35/3</td>
<td>Development of functional insect flours for monogastric feeding.</td>
<td>Prof. Luciana Rossi</td>
<td>Società Agricola Italian Cricket Farm Srl</td>
</tr>
<tr>
<td>R35/4</td>
<td>Environmental benefit and burden of postbiotics in animal nutrition.</td>
<td>Prof. Giovanni Savoini</td>
<td>Prosol Spa</td>
</tr>
<tr>
<td>R35/5</td>
<td>Technical interventions in dairy cow farms for the reduction of antibiotic in both lactation and dry conditions in order to optimize corporate sustainability.</td>
<td>Prof. Paolo Moroni</td>
<td>ARAP (Piedmont Regional Breeders Association)</td>
</tr>
<tr>
<td>R35/7</td>
<td>Sustainability, energy and animal welfare at slaughter (SEBEM).</td>
<td>Dr. Emanuela Dalla Costa</td>
<td>Biogas Sardegna Green Srl</td>
</tr>
<tr>
<td>R35/8</td>
<td>Use of essential oils and organic acids to reduce CO2 and methane emissions in ruminants.</td>
<td>Prof. Fabrizio Ceciliani</td>
<td>Sila Srl</td>
</tr>
</tbody>
</table>

**Duration**
3 years

**Doctoral Programme Coordinator**
Prof. Fabrizio Ceciliani, full professor, subject area VET/03
fabrizio.ceciliani@unimi.it
Admission requirements

All master's degree classes

Reference letters

The Academic Board requires that two reference letters, drawn up according to Form 2 attached hereto, be sent by email to phdcourse.vas@unimi.it

PhD programme in Veterinary and animal science - Selection process

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PhD programme in Sociology and methodology of social research (SOMET)

Scholarships and research topics

- 1 scholarship on GREEN issues

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<tbody>
<tr>
<td>R36/1</td>
<td>Green sociology and consumption: science and technology studies applied to environmental issues.</td>
<td>Prof. Giovanni Semi</td>
<td>iCoolhunt Spa</td>
</tr>
</tbody>
</table>

Partner universities
University of Milan (administrative office)
University of Turin

Duration
3 years

Doctoral Programme Coordinator
Prof. Giovanni Semi, associate professor, University of Turin, subject area SPS/07
giovanni.semi@unito.it

Admission requirements
All master’s degree classes

Reference letters
The Academic Board requires that one reference letter, drawn up according to Form 2 attached hereto, be sent by email to dottorato.somet@unimi.it

PhD programme in Sociology and methodology of social research (SOMET) - Selection process

Assessment of qualifications
Qualifications will be assessed on 10 November 2021.
The outcome of the assessment will be available on the University website by the start date of the interviews.

Interviews
Online interviews will take place on 12 and/or 15 November 2021.
The interview will be in English.
The interview date and time for each candidate will be posted to the University website.
Such posting is equivalent to notice to the candidate.
PhD programme in Economic sociology and labour studies

Scholarships and research topics

- **1 scholarship on INNOVATION issues**

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<tr>
<td>R37/1</td>
<td>Top Management roles and skills for fostering digital transformation of Italian companies.</td>
<td>Prof. Marco Guerci</td>
<td>Eric Salmon &amp; Partners Sas</td>
</tr>
</tbody>
</table>

**Duration**

3 years

**Doctoral Programme Coordinator**

Prof. Gabriele Ballarino, full professor, subject area SPS/09

gabriele.ballarino@unimi.it

**Admission requirements**

All master’s degree classes

**Reference letters**

The Academic Board requires that two reference letters, drawn up according to Form 2 attached hereto, be sent by email to call.esls@unimi.it

PhD programme in Economic sociology and labour studies - Selection process

**Assessment of qualifications**

Qualifications will be assessed on 10 November 2021.

The outcome of the assessment will be available on the University website by the start date of the interviews.

**Interviews**

Online interviews will take place on 12 and/or 15 November 2021.

The interview will be in English.

The interview date and time for each candidate will be posted to the University website.

Such posting is equivalent to notice to the candidate.
PhD programme in Linguistic, literary and intercultural studies in European and extra-European perspectives

Scholarships and research topics

- **1 scholarship on GREEN issues**

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<tbody>
<tr>
<td>R39/1</td>
<td>Inclusion of sign languages in multi-lingual and multi-cultural communication of green issues for sustainable growth in the European context.</td>
<td>Prof. Monica Barsi</td>
<td>VEASYT Srl</td>
</tr>
</tbody>
</table>

**Duration**

3 years

**Doctoral Programme Coordinator**

Prof. Maria Vittoria Calvi, full professor, subject area L-LIN/07
[maria.calvi@unimi.it](mailto:maria.calvi@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/14 (Modern philology)
- LM/36 (Asian and African languages and literature)
- LM/37 (Modern American and European languages and literature)
- LM/38 (Languages and cultures for international communication and cooperation)
- LM/39 (Linguistics)
- LM/94 (Interpreting and specialist translation)

**PhD programme in Linguistic, literary and intercultural studies in European and extra-European perspectives - Selection process**

**Assessment of qualifications**

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PhD programme in Historical studies

Scholarships and research topics

- **2 scholarships on GREEN issues**

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<tbody>
<tr>
<td>R51/1</td>
<td>Environmental history at the service of forest restoration in the Padana ecoregion.</td>
<td>Prof. Alessandra Dattero</td>
<td>JengaLab Cultural Association</td>
</tr>
<tr>
<td>R51/2</td>
<td>Heritage and innovation in Italian creative districts: the transformations towards sustainable and inclusive fashion (the Diesel/OTB case).</td>
<td>Prof. Emanuela Scarpellini</td>
<td>Diesel/OTB</td>
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**1 scholarship on INNOVATION issues**

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<tbody>
<tr>
<td>R51/3</td>
<td>University press revolutions: new professional skills and new formats for textbooks and scientific research.</td>
<td>Prof. Irene Piazzoni</td>
<td>Pearson Italia Spa</td>
</tr>
</tbody>
</table>

**Duration**

3 years

**Doctoral Programme Coordinator**

Prof. Marco Soresina, full professor, subject area M-STO/04
[marco.soresina@unimi.it](mailto:marco.soresina@unimi.it)

**Admission requirements**

All master’s degree classes

**Reference letters**

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

**PhD programme in Historical studies - Selection process**

**Assessment of qualifications**

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PhD programme in Studies on organized crime

Scholarships and research topics

- **1 scholarship on GREEN issues**

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<td>R44/1</td>
<td>Ecomafia in Lombardy: arson and attacks on the ecosystem</td>
<td>Prof. Fabio Basile</td>
<td>&quot;Libera - Associazioni, nomi e numeri contro le mafie&quot;</td>
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- **1 scholarship on INNOVATION issues**

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<tr>
<td>R44/2</td>
<td>Artificial intelligence systems for investigating organized crime</td>
<td>Prof. Fabio Basile</td>
<td>&quot;Libera - Associazioni, nomi e numeri contro le mafie&quot;</td>
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</table>

**Duration**

3 years

**Doctoral Programme Coordinator**

Prof. Fabio Basile, full professor, subject area IUS/17

fabio.basile@unimi.it

**Admission requirements**

All master's degree classes

**Reference letters**

The Academic Board requires that one reference letter, drawn up according to Form 2 attached hereto, be sent by email to monica.massari@unimi.it.

**PhD programme in Studies on organized crime - Selection process**

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