Course in: ARCHITECTURE AND DESIGN

Course in: BIOENGINEERING AND ROBOTICS

Course in: BIOTECHNOLOGIES IN TRANSLATIONAL MEDICINE

Course in: CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING

Course in: DIGITAL HUMANITIES, DIGITAL TECHNOLOGIES, THE ARTS, LANGUAGES, CULTURES AND COMMUNICATION

Course in: LAW STUDIES

Course in: ECONOMICS AND POLITICAL ECONOMY (CODE 7721)

Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Course in: PHYSICS AND NANOSCIENCES

Course in: CLINICAL AND EXPERIMENTAL IMMUNOLOGY (CODE 7739)

Course in: COMPUTER SCIENCE AND SYSTEMS ENGINEERING

Course in: MODELS, MACHINES AND SYSTEMS ENGINEERING FOR ENERGY, THE ENVIRONMENT AND TRANSPORT

Course in: MECHANICAL, ENERGY AND MANAGEMENT ENGINEERING

Course in: JOINT DOCTORATE IN INTERACTIVE AND COGNITIVE ENVIRONMENTS (JD ICE)

Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES

Course in: MATHEMATICS AND APPLICATIONS

Course in: EXPERIMENTAL MEDICINE

Course in: NEUROSCIENCES

Course in: HEALTH SCIENCES

Course in: MARINE SCIENCES AND TECHNOLOGIES

Course in: SCIENCE AND TECHNOLOGY OF CHEMISTRY AND MATERIALS

Course in: SCIENCE AND TECHNOLOGY FOR THE ENVIRONMENT AND TERRITORY (STET)

Course in: SCIENCE AND TECHNOLOGY FOR ELECTRICAL ENGINEERING, COMPLEX SYSTEMS FOR MOBILITY

Course in: SCIENCE AND TECHNOLOGY FOR ELECTRONIC AND TELECOMMUNICATION ENGINEERING

Course in: PAEDIATRIC SCIENCES

Course in: SOCIAL SCIENCES

Course in: THE STUDY AND ENHANCEMENT OF THE HISTORICAL, ARTISTIC-ARCHITECTURAL AND ENVIRONMENTAL HERITAGE
Course in: ARCHITECTURE AND DESIGN

Curriculum: ARCHITECTURE (CODE 7696)

Coordinator: Gausa Navarro Manuel
Department of Architecture and Design (Dipartimento di Architettura e Design – DAD)

**Places:** 6 (*) – **Grants:** 3 (*)

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

(*) 1 grant co-funded by MIUR/DAD, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

(°) 2 places for graduates who have a grant from abroad.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Test</td>
<td>2.7.2019 – 9.30 a.m. at the Department of Architecture and Design (Dipartimento di Architettura e Design – DAD), Stradone S. Agostino 37, Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>3.7.2019 – 9.30 a.m at the Department of Architecture and Design (Dipartimento di Architettura e Design – DAD), Stradone S. Agostino 37, Genova.</td>
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Further information on how to present qualifications/publications
On the day of the interview, candidates may present a portfolio containing previous study/research experiences. All candidates are required to present a proposal for a research project (maximum 10,000 strokes, 4 pages). The project will be evaluated by the Commission together with the qualifications/publications and will be discussed during the interview.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>- A paper on one of the research themes put forward by the examining Commission.</td>
</tr>
<tr>
<td>- An interview based on the outcome of the written test and on the candidate’s research themes of interest.</td>
</tr>
<tr>
<td>- Reading and translation of an English text.</td>
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<th>Research Themes</th>
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</tr>
<tr>
<td>- urban and territorial policies;</td>
</tr>
<tr>
<td>- theory of the project;</td>
</tr>
<tr>
<td>- strategies and technologies for sustainability and the systemic project;</td>
</tr>
<tr>
<td>- visual languages and communication.</td>
</tr>
</tbody>
</table>

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<tr>
<td>Reference letters are not required. Nonetheless, any reference letters received will not be taken into consideration for the final score.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Foreign Languages</th>
</tr>
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<tbody>
<tr>
<td>English</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Further Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dott.ssa Michela Mazzucchelli</td>
</tr>
<tr>
<td>(+39) 0102095810</td>
</tr>
<tr>
<td><a href="mailto:dottoratodad@arch.unige.it">dottoratodad@arch.unige.it</a></td>
</tr>
<tr>
<td><a href="http://www.addgenova.org/DSA/it">http://www.addgenova.org/DSA/it</a></td>
</tr>
</tbody>
</table>

2
**Course in:** ARCHITECTURE AND DESIGN

**Curriculum:** DESIGN (CODE 7697)

| **Coordinator:** Gausa Navarro Manuel |
| **Department of Architecture and Design (Dipartimento di Architettura e Design – DAD)** |
| **Places:** 3 (*) – **Grants:** 2 (*) |

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

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| **Further information on how to present qualifications/publications** | On the day of the interview, candidates may present a portfolio containing previous study/research experiences. All candidates are required to present a proposal for a research project (maximum 10,000 strokes, 4 pages). The project will be evaluated by the Commission together with the qualifications/publications and will be discussed during the interview. |

| **Exam Syllabus** | - A paper on one of the research themes put forward by the examining Commission. <br> - An interview based on the outcome of the written test and on the candidate’s research themes of interest. <br> - Reading and translation of an English text. |

| **Research Themes** | The likely research themes, which are partially the object of comparative assessment, are those linked to the teaching objectives of the Doctoral Course, according to the 4 main lines of research of the course: <br> - urban and territorial policies; <br> - theory of the project; <br> - strategies and technologies for sustainability and the systemic project; <br> - visual languages and communication. |

| **Information on references** | Reference letters are not required. Nonetheless, any reference letters received will not be taken into consideration for the final score. |

| **Foreign Languages** | English |

| **Further Information** | Dott.ssa Michela Mazzucchelli <br> (+39) 0102095810 <br> dottoratodad@arch.unige.it <br> http://www.addgenova.org/DSA/it/ |
Course in: BIOENGINEERING AND ROBOTICS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: ADVANCED AND HUMANOID ROBOTICS (CODE 7698)

| Coordinator: Cannata Giorgio |
| Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi – DIBRIS) |
| Places: 11 – Grants: 8 (*) (**) |

(⁎) 8 grants from the Foundation of the Italian Institute of Technology (IIT), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16,500.00.

| Comparative assessment procedure | QUALIFICATIONS/PUBLICATIONS |
| Further information on how to present qualifications/publications | Candidates must submit an exhaustive list of all the exams sat during their Bachelor’s and Master’s degree and/or equivalents (BS, Master) specifying the averages of marks or an equivalent indicator. |
| - the specific research themes candidates want to be evaluated on (see list of topics relevant to each curriculum, website http://phd.dibris.unige.it/biorob/index.php/how-to-apply); |
| - a project work related to one (or more) of the themes offered, see the template http://phd.dibris.unige.it/biorob/index.php/how-to-apply); website, http://phd.dibris.unige.it/biorob/index.php/how-to-apply); |
| - a curriculum vitae et studiorum including all the technical-scientific studies/activities already done and pertinent to the doctoral programme; |
| - Name(s), status and place of employment of the referee(s)- from one up to three- chosen by the candidates to support their candidature. |

| Research Themes |
| - Control of humanoid robots. |
| - Legged robots. |
| - Robot design and manipulation. |
| - Perception and learning. |
| - Teleoperation. |
| - Exoskeletons. |
| - Robot actuators. |
| - Multimodal perception. |
| - Robot assisted microsurgery. |
| - Assistive robots. |
| - Industrial robotics for inspection and maintenance. |

Specific themes will be presented in an attachment available at the following links: http://phd.dibris.unige.it/biorob/index.php/how-to-apply https://www.iit.it/phd-school

| Information on references |
| Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: phd.biorob@dibris.unige.it. |

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

| Foreign Languages |
| English |

| Further Information |
| For information on the research themes relevant to the Advanced and Humanoid Robotics curriculum please contact: |
| Dr. Ferdinando Cannella ferdinando.cannella@iit.it (Advanced Robotics) |
| Dr. Lorenzo Natale lorenzo.natale@iit.it (Humanoid Robotics) |

(⁎) 2 grants added on 31.05.2019 following the proposal to amend the agreement signed on 30.05.2019.
**Course in: BIOENGINEERING AND ROBOTICS**  
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

**Curriculum: BIOENGINEERING (CODE 7699)**

<table>
<thead>
<tr>
<th><strong>Coordinator:</strong> Cannata Giorgio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi – DIBRIS)</td>
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</tbody>
</table>

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<tr>
<th><strong>Places:</strong> 10 – <strong>Grants:</strong> 7 (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(*) 4 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16,500,00.</td>
</tr>
<tr>
<td>(*) 1 grant funded by DIBRIS based on the European Project VBC (Virtual Brain Cloud). The gross annual amount of the scholarship is € 16,500,00 including social security contributions charged to the scholarship recipient.</td>
</tr>
<tr>
<td>(*) 2 grants funded by the Foundation of the Italian Institute of Technology (IIT), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16,500,00.</td>
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<td><strong>Further information on how to present qualifications/publications</strong></td>
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<td>- a curriculum vitae et studiorum including all the technical-scientific studies/activities already done and pertinent to the doctoral programme;</td>
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<td>- Name(s), status and place of employment of the referee(s) - from one up to three- chosen by the candidates to support their candidature.</td>
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<tr>
<th><strong>Research Themes</strong></th>
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<tbody>
<tr>
<td>- Bioinformatics and medical information systems.</td>
</tr>
<tr>
<td>- Bioelectronics.</td>
</tr>
<tr>
<td>- Bio-sensors.</td>
</tr>
<tr>
<td>- Molecular, cellular and tissue engineering.</td>
</tr>
<tr>
<td>- Neuroengineering and neurotechnology.</td>
</tr>
<tr>
<td>- Micro and nano-systems in medicine and biology</td>
</tr>
<tr>
<td>- Data analysis of electrophysiological signals</td>
</tr>
</tbody>
</table>

Specific themes will be presented in an attachment available at the following links:  
https://www.iit.it/phd-school

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<tbody>
<tr>
<td>For information on the research themes relevant to the Bioengineering curriculum please contact:</td>
</tr>
<tr>
<td>Prof. Paolo Massobrio</td>
</tr>
<tr>
<td><a href="mailto:paolo.massobrio@unige.it">paolo.massobrio@unige.it</a></td>
</tr>
</tbody>
</table>
Course in: BIOENGINEERING AND ROBOTICS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: BIONANOTECHNOLOGY (CODE 7700)

<table>
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<th>Coordinator: Cannata Giorgio</th>
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<tbody>
<tr>
<td>Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi – DIBRIS)</td>
</tr>
<tr>
<td>Places: 7 – Grants: 7 (*)</td>
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<td>(*) 7 grants from the Foundation of the Italian Institute of Technology (IIT), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00.</td>
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Comparative assessment procedure | QUALIFICATIONS/PUBLICATIONS
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Further information on how to present qualifications/publications | Candidates must submit an exhaustive list of all the exams sat during their Bachelor’s and Master’s degree and/or equivalents (BS, Master) specifying the averages of marks or an equivalent indicator.
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- a project work related to one (or more) of the themes offered, see the template http://phd.dibris.unige.it/biorob/index.php/how-to-apply; website, http://phd.dibris.unige.it/biorob/index.php/how-to-apply);
- a curriculum vitae et studiorum including all the technical-scientific studies/activities already done and pertinent to the doctoral programme;
- Name(s), status and place of employment of the referee(s)- from one up to three- chosen by the candidates to support their candidature.

Research Themes
- Cells-to-chip and cells-to-cells technologies.
- Nanobiosensors.
- Nanodiagnostics.
- Intelligent drug delivery.
- Artificial tissues.
- Smart materials.
- Optical microscopy and super-resolution microscopy
- Biomolecular spectroscopy

Specific themes will be presented in an attachment available at the following links: http://phd.dibris.unige.it/biorob/index.php/how-to-apply
https://www.iit.it/phd-school

Information on references
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: phd.biorob@dibris.unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages
English

Further Information
For information on the research themes relevant to the Bionanotechnologies curriculum please contact:
Dr. Giuseppe Vicidomini giuseppe.vicidomini@iit.it
**Course in: BIOENGINEERING AND ROBOTICS**  
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

**Curriculum: COGNITIVE ROBOTICS, INTERACTION AND REHABILITATION TECHNOLOGIES (CODE 7701)**

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<td>- a curriculum vitae et studiorum including all the technical-scientific studies/activities already done and pertinent to the doctoral programme;</td>
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<td>- Name(s), role and place of employment of the referee(s)- from one up to three- chosen by the candidates to support their candidature.</td>
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</tr>
</tbody>
</table>

**Research Themes**

- Human sensorimotor and cognitive abilities
- Action execution and understanding in humans and robots
- iCub cognitive architecture
- Human–robot social interaction, cooperation and symbiosis
- Assistive technologies to alleviate sensory disabilities
- Development and validation of robotic rehabilitation devices in social and clinical context
- Sensorimotor development in childhood and related support technologies
- Technologies to enhance sensorimotor and interaction abilities in social context

Specific themes will be presented in an attachment available at the following links:  
http://phd.dibris.unige.it/biorob/index.php/how-to-apply  
https://www.iit.it/phd-school

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: phd.biorob@dibris.unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages**

English

**Further Information**

For information on the research themes relevant to the Cognitive Robotics, Interaction and Rehabilitation Technologies curriculum please contact:

Prof. Giulio Sandini  
giulio.sandini@iit.it
Course in: BIOENGINEERING AND ROBOTICS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: ROBOTICS AND AUTONOMOUS SYSTEMS (CODE 7703)

Coordinator: Cannata Giorgio

Polytechnic Section of the Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi – DIBRIS)

Places: 7 (°°°) – Grants: 3 (*)

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16,500,00.

(*) 1 grant from MIUR/DIBRIS funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16,500,00. (°°)

Comparative assessment procedure

QUALIFICATIONS/PUBLICATIONS

Further information on how to present qualifications/publications

Candidates must submit an exhaustive list of all the exams done during their Bachelor’s and Master’s degree and/or equivalents (BS, Master) specifying the averages of marks or an equivalent indicator.

- The specific research themes candidates want to be evaluated on (see list of topics relevant to each curriculum, website http://phd.dibris.unige.it/biorob/index.php/how-to-apply);
- a project work related to one (or more) of the themes offered, see the template http://phd.dibris.unige.it/biorob/index.php/how-to-apply; webpage,
- a curriculum vitae et studiorum including all the technical-scientific studies/activities already done and pertinent to the doctoral programme;
- Name(s), role and place of employment of the referee(s) - from one up to three - chosen by the candidates to support their candidature.

Research Themes

- Advanced robot control.
- Robot coordination and cooperation.
- Human Robot Interaction Control.
- Cognitive Robot Control
- Sensing and state estimation.
- Sensor based robot planning and control
- Knowledge representation.
- Motion planning.
- Real-time scheduling.
- Design of macro/micro robot systems.
- Design of sensors and actuators.
- Aerial and space robotics.
- Wheeled and legged robots.
- Manipulation.

Specific themes will be presented in an attachment available at the following links:
http://phd.dibris.unige.it/biorob/index.php/how-to-apply

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: phd.biorob@dibris.unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

English

Further Information

For information on the research themes relevant to the Robotics and Autonomous Systems curriculum please contact:

Prof. Fulvio Mastrogiovanni
fulvio.mastrogiovanni@unige.it

(°°) Information updated on 8.05.2019 due to clerical error.

(°°°) n. 1 position without grant added on 31.05.2019 on request of the course Coordinator.
Course in: BIOENGINEERING AND ROBOTICS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: MARINE TECHNOLOGIES (CODICE 7702)

Coordinator: Cannata Giorgio
Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi – DIBRIS)

Places: 1 – Grants: 1 (*)
(*) 1 grant from DIBRIS funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16,500,00.

Comparative assessment procedure

QUALIFICATIONS/PUBLICATIONS

Further information on how to present qualifications/publications
Candidates must submit an exhaustive list of all the exams done during their Bachelor’s and Master’s degree and/or equivalents (BS, Master) specifying the averages of marks or an equivalent indicator.
- The specific research themes candidates want to be evaluated on (see list of topics relevant to each curriculum, website http://phd.dibris.unige.it/biorob/index.php/how-to-apply);
- a project work related to one (or more) of the themes offered, see the template http://phd.dibris.unige.it/biorob/index.php/how-to-apply; website,
  http://phd.dibris.unige.it/biorob/index.php/how-to-apply);
- a curriculum vitae et studiorum including all the technical-scientific studies/activities already done and pertinent to the doctoral programme;
- Name(s), Status and place of employment of the referee(s) from one up to three chosen by the candidates to support their candidature.

Research Themes
Marine robotics team for area exploration and monitoring.
Specific themes will be presented in an attachment available at the following links: http://phd.dibris.unige.it/biorob/index.php/how-to-apply.

Information on references
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: phd.biorob@dibris.unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages
English

Further Information
For information on the research themes relevant to the Cognitive Robotics, Interaction and Rehabilitation Technologies curriculum please contact:
Prof. Giuseppe Casalino
giuseppe.casalino@unige.it
**Course in:** BIOTECHNOLOGIES IN TRANSLATIONAL MEDICINE

**Curriculum:** BIOIMAGING (CODE 7704)

<table>
<thead>
<tr>
<th><strong>Coordinator:</strong></th>
<th>Quarto Rodolfo</th>
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<tbody>
<tr>
<td>Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES)</td>
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</table>

**Places:** 1 – **Grants:** 1 (*)

(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

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<tr>
<th><strong>Comparative assessment procedure</strong></th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
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<tbody>
<tr>
<td><strong>Interview</strong></td>
<td>2.7.2019 – 2.00 pm at the Advanced Biotechnologies Centre (Centro di Biotecnologie Avanzate) Library, First floor.</td>
</tr>
</tbody>
</table>

**Further information on how to present qualifications/publications**

All candidates are requested to present a proposal for a research project (2 A4 pages maximum, character size 12) together with their qualifications/publications. The project, which will be discussed during the interview, will be evaluated by the commission together with the qualifications/publications.

**Exam Syllabus**

The interview will be on the qualifications/publications and research project presented.

**Research Themes**

- Molecular bioimaging.
- Biomedical imaging.
- Computational bioimaging.

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: rodolfo.quarto@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages**

English

**Further Information**

Coordinator
Prof. Rodolfo Quarto
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558240
rodolfo.quarto@unige.it

Contact person for the Curriculum (for information of scientific nature)
Prof. Gianmario Sambuceti
Department of Health Sciences
(+39) 0105552026
gianmario.sambuceti@unige.it

Organizing Secretarial Office (for information of technical nature)
Mr Enrico Zeraschi
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES)
(+39) 0105558266
enrico.zeraschi@unige.it
# Course in: BIOTECHNOLOGIES IN TRANSLATIONAL MEDICINE

## Curriculum: CELLULAR AND MOLECULAR BIOTECHNOLOGIES (CODE 7705)

<table>
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<tr>
<th>Coordinator: Quarto Rodolfo</th>
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<tr>
<td>Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES)</td>
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<tr>
<td><strong>PlACES:</strong> 1 – <strong>Grants:</strong> 1 (*)</td>
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### Comparative assessment procedure

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<td><strong>Interview</strong></td>
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<td>2.7.2019 – 2.00 pm at the Advanced Biotechnologies Centre (Centro di Biotecnologie Avanzate) Library, 1st Floor.</td>
</tr>
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</table>

### Further information on how to present qualifications/publications

All candidates are requested to present a proposal for a research project (2 A4 pages maximum, character size 12) together with their qualifications/publications. The project, which will be discussed during the interview, will be evaluated by the commission together with the qualifications/publications.

### Exam Syllabus

The interview will be on the qualifications/publications and research project presented.

### Research Themes

- Innovative diagnostics.
- Therapeutic treatments.
- New products for pharmaceutical use.
- Gene therapy.
- Cellular therapies.
- Immunosuppressive therapies.
- Anticancer therapies.

### Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: rodolfo.quarto@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

### Foreign Languages

English

### Further Information

Coordinator  
Prof. Rodolfo Quarto  
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558240  
rodolfo.quarto@unige.it

Contact person for the Curriculum (for information of scientific nature)  
Prof. Aldo Pagano  
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558213  
aldo.pagano@unige.it

Organizing Secretarial Office (for information of technical nature)  
Mr Enrico Zeraschi  
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558266  
enrico.zeraschi@unige.it
Course in: BIOTECHNOLOGIES IN TRANSLATIONAL MEDICINE

Curriculum: TRANSLATIONAL SURGERY (CODE 7706)

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<tr>
<th>Coordinator:</th>
<th>Quarto Rodolfo</th>
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<tr>
<td>Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES)</td>
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<td>Places:</td>
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<td>Interview</td>
<td>2.7.2019 – 2.00 pm at the Advanced Biotechnologies Centre (Centro di Biotecnologie Avanzate) Library, first floor, Largo R.Benzi 10, Genova.</td>
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</table>

| Further information on how to present qualifications/publications | All candidates are requested to present a proposal for a research project (2 A4 pages maximum, character size 12) together with their qualifications/publications. The project, which will be discussed during the interview, will be evaluated by the commission together with the qualifications/publications. |

<table>
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<tr>
<th>Exam Syllabus</th>
<th>The interview will be on the qualifications/publications and research project presented.</th>
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<tbody>
<tr>
<td>Research Themes</td>
<td>Experimental diagnostic and therapeutic approaches in general, specialist surgery, anaesthesiology and in integrated diagnostic methodologies.</td>
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</table>

| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: rodolfo.quarto@unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

| Foreign Languages | English |

<table>
<thead>
<tr>
<th>Further Information</th>
<th>Coordinator Prof. Rodolfo Quarto Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558240 <a href="mailto:rodolfo.quarto@unige.it">rodolfo.quarto@unige.it</a></th>
</tr>
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<tbody>
<tr>
<td>Contact person for the Curriculum (for information of scientific nature) Prof. Marco Frascio Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC) (+39) 0103537217 <a href="mailto:mfrascio@unige.it">mfrascio@unige.it</a></td>
<td></td>
</tr>
<tr>
<td>Organizing Secretarial Office (for information of technical nature) Mr Enrico Zeraschi Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558266 <a href="mailto:enrico.zeraschi@unige.it">enrico.zeraschi@unige.it</a></td>
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</table>
## Course in: BIOTECHNOLOGIES IN TRANSLATIONAL MEDICINE

### Curriculum: REGENERATIVE MEDICINE AND TISSUE ENGINEERING (CODE 7707)

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<tr>
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| Further information on how to present qualifications/publications | All candidates are requested to present a proposal for a research project (2 A4 pages maximum, character size 12) together with their qualifications/publications. The project, which will be, discussed during the interview, will be evaluated by the commission together with the qualifications/publications. |

| Exam Syllabus | The interview will be on the qualifications/publications and research project presented. |

| Research Themes | - Cellular therapy.  
- Tissue engineering.  
- Development of biocompatible biomaterials, biodegradable and capable of integrating molecules and cells.  
- Delivery of growth factors, cytokines and other pharmacologically active molecules.  
- Immunology and biology of transplants.  
- Immunotherapy.  
- Gene therapy. |

| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: rodolfo.quarto@unige.it.  

The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

| Foreign Languages | English |

| Further Information | Coordinator  
Prof. Rodolfo Quarto  
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558240  
rodolfo.quarto@unige.it |
|---------------------|-------------------------------------------------------------|
| Contact person for the Curriculum (for information of scientific nature) | Prof. Paolo Giannoni  
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558436  
paolo.giannoni@unige.it |
| Organizing Secretarial Office (for information of technical nature) | Mr Enrico Zeraschi  
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558266  
enrico.zeraschi@unige.it |
Course in: BIOTECHNOLOGIES IN TRANSLATIONAL MEDICINE

Curriculum: TRANSLATIONAL AND PRECISION MEDICINE (CODE 7708)

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<tr>
<th>Coordinator</th>
<th>Quarto Rodolfo</th>
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<tr>
<td>Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES)</td>
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<tr>
<td>Places</td>
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| Further information on how to present qualifications/publications | All candidates are requested to present a proposal for a research project (2 A4 pages maximum, character size 12) together with their qualifications/publications. The project, which will be discussed during the interview, will be evaluated by the commission together with the qualifications/publications. |
| Research Themes | - Pathologies linked to ageing in the eye.  
      - Chronic degenerative pathologies.  
      - Cancer Biology and innovative therapeutic approaches.  
      - Biological effects of the secretoma.  |

| Exam Syllabus | The interview will be on the qualifications/publications and research project presented. |

| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: rodolfo.quarto@unige.it.  

The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

| Foreign Languages | English |

| Further Information | Coordinator  
      Prof. Rodolfo Quarto  
      Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558240  
      rodolfo.quarto@unige.it  

Contact person for the Curriculum (for information of scientific nature)  
Prof. Lucia Del Mastro  
IRCCS AOU San Martino – IST  
(+39) 0105558908  
lucia.delmastro@hsanmartino.it  

Organizing Secretarial Office (for information of technical nature)  
Mr Enrico Zeraschi  
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES)  
(+39) 0105558266  
enrico.zeraschi@unige.it |
**Course in:** CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING  

**Curriculum:** FLUID DYNAMICS AND ENVIRONMENTAL ENGINEERING (CODE 7710)

| Coordinator: Roberta Massabò  
| Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale – DICCA)  
| **Places:** 6 (*) – **Grants:** 3 (*) (**°**)  
| (*) 1 funded by Università di Genova. The gross annual amount of the scholarship is € 15.343,28 including social security contributions charged to the scholarship recipient.  
| (*) 1 funded by CNR/ISMAR. The gross annual amount of the scholarship is € 15.343,28 including social security contributions charged to the scholarship recipient.  
| (*) 1 funded by DICCA. The gross annual amount of the scholarship is € 16.500,00 including social security contributions charged to the scholarship recipient.  
| (°) 2 reserved within the international mobility programme H2020-MSCA-ITN-2019, progetto Polka 813367; of which 1 place with research grant activated by Università degli Studi di Genova and 1 place with contract with Ansaldo Energia. The salary will be paid in accordance with the general conditions of the Marie Skłodowska-Curie Actions-ITN projects. For both categories the beneficiaries must fall into the category of early stage researchers (ESR), ie the recruitment data must be in the first 4 years of their research career and not have already obtained a doctorate degree and meet the mobility rule ‘the main activity (work, study, etc.) in the host country must not have been resounded or performed for more than 12 months in the previous 3 years prior to the recruitment data. The positions were also viewed on the website www.euraxess.si/jobs/383115 (**°°°°)**

| Comparative assessment procedure | QUALIFICATIONS/PUBLICATIONS AND INTERVIEW  
| **Interview** | 12.7.2019 – 9.00 am at the Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale – DICCA), room A11, via Montallegro 1, Genova.  
| Should there be a high number of candidates, the interviews will continue on the following day. The interview may also take place electronically, on candidates' request, by contacting the doctoral secretarial staff (dottorato.dicca@unige.it) and Prof. Rodolfo Repetto (rodolfo.repetto@unige.it) at least 15 days before the evaluation. Candidates must have a reliable Internet connection to allow for the test to be carried out.  
| **Further information on how to present qualifications/publications** | The application (curriculum) must contain a document stating the courses followed and marks obtained throughout the candidate's university career. Undergraduate candidates at the deadline of the public notice can submit further documentation, which they deem more appropriate, in order to document their university career.  
| The knowledge of foreign languages proved by an international certificate (TOEFL, CPE, CAE, FCE, …) and attached to the cv would be an asset.  
| **Exam Syllabus** | The interview will be a detailed scientific discussion of the candidate’s research project, his/her Curriculum and his/her qualifications/publications. The interview is also aimed at verifying that the candidate has adequate knowledge to deal with studies in the chosen curriculum.  
| **Research Themes** | The themes dealt with in the curriculum of the “Fluid Dynamics and Environmental Engineering” course, are described in detail on the course web page: http://dottorato.dicca.unige.it/eng/fluamb/  
| In the research project (max 10 pages) the candidate’s interests and related motivations must be highlighted. In addition, it must include a short abstract, the State of the Art and publications and the aims of the activity.  
| **Information on references** | Candidates must choose not less than one and not more than three referees to support their candidature. It is preferable for one of the referees to be a member of the curriculum (http://dottorato.dicca.unige.it/eng/info/staff/comitatofluamb.html) with whom the research project has been agreed. (**°**) These referees must however be university professors or experts in the subject. If the referee is an expert in the subject, his/her Curriculum Vitae and a list of publications are also required. It will be the referees’ concern to send reference letters, within the deadline of the public notice, to the doctoral secretariat: dottorato.dicca@unige.it.  
| The name, status and service place of the referees chosen by the candidates must be stated in their applications. Reference letters that are not presented as requested will not be taken into consideration.  
| **Foreign Languages** | English  
| **Further Information** | http://dottorato.dicca.unige.it/eng/  
| Prof. Rodolfo Repetto |
Course in: CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING

Curriculum: CHEMICAL, MATERIALS AND PROCESS ENGINEERING (CODE 7709)

**Coordinator:** Roberta Massabò

Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale – DICCA)

**Places:** 4 – **Grants:** 3 (*)

(*) 2 grants funded by Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.

(*) 1 grant funded by DICCA; the gross annual amount of the scholarship is € 15,343,28 including social security contributions charged to the scholarship recipient.

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<td><strong>Interview</strong></td>
<td>12.7.2019 – 9 am at the Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale – DICCA), room A11, via Montallegro 1, Genova.</td>
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<tr>
<td></td>
<td>Should there be a high number of candidates, the interviews will continue on the following day.</td>
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<td>The interview may also take place electronically, on candidates’ request, by contacting the doctoral secretarial staff (<a href="mailto:dottorato.dicca@unige.it">dottorato.dicca@unige.it</a>) and Prof. Attilio Converti <a href="mailto:converti@unige.it">converti@unige.it</a> at least 15 days before the evaluation. Candidates must have a reliable Internet connection to allow for the test to be carried out.</td>
</tr>
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**Further information on how to present qualifications/publications**

The application (curriculum) must contain a document (transcript of records) stating the courses followed and marks obtained throughout the candidate's university career (Bachelor and M.Sc.). The knowledge of a foreign language, proved by an international certificate (TOEFL, CPE, CAE, FCE, …) and attached to the cv is a preferential title.

Candidates whom have not yet received the M.Sc. degree at the deadline of the public notice can submit further documentation, which they deem more appropriate, in order to document their university career.

**Exam Syllabus**

The interview will be a detailed scientific discussion of the candidate’s research project, his/her Curriculum and his/her qualifications/publications. The interview is also aimed at verifying that the candidate has adequate knowledge to deal with studies in the chosen curriculum.

**Research Themes**

The themes dealt with in the curriculum of “Chemical, Materials and Process Engineering” are described in detail on the curriculum web page: [http://dottorato.dicca.unige.it/eng/chmatpr/](http://dottorato.dicca.unige.it/eng/chmatpr/)

In the research project (max 10 pages) the candidate’s interests and related motivations must be highlighted. In addition, it must include a short abstract, the State of the Art and publications and the aims of the activity.

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. One of the referees must be a member of the curriculum ([http://dottorato.dicca.unige.it/eng/info/staff/comitatochmatpr.html](http://dottorato.dicca.unige.it/eng/info/staff/comitatochmatpr.html)) with whom the research project has been agreed. The referees must be university professors or experts in the subject. If the referee is an expert in the subject, his/her Curriculum Vitae and a list of publications are also required. It will be the referees' concern to send reference letters, within the deadline of the public notice, to the doctoral secretariat: [dottorato.dicca@unige.it](mailto:dottorato.dicca@unige.it).

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Reference letters that are not presented as requested will not be taken into consideration.

**Foreign Languages**

English

**Further Information**

[http://dottorato.dicca.unige.it/eng/](http://dottorato.dicca.unige.it/eng/)

Prof. Attilio Converti

[converti@unige.it](mailto:converti@unige.it)
Course in: CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING

Curriculum: STRUCTURAL AND GEOTECHNICAL ENGINEERING, MECHANICS AND MATERIALS (CODE 7711)

<table>
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<tr>
<th>Coordinator:</th>
<th>Roberta Massabò</th>
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<tr>
<td>Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale – DICCA)</td>
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**Places:** 4 (*) – **Grants:** 3 (*)

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28.

(*) 1 grant co-funded by MIUR/DICCA, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28.

**Comparative assessment procedure**

**QUALIFICATIONS/PUBLICATIONS AND INTERVIEW**

**Interview**

12.7.2019 – 9 am at the Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale – DICCA), room A11, via Montallegro 1, Genova.

The interview may also take place electronically, on candidates' request, by contacting the doctoral secretarial staff (dottorato.dicca@unige.it) and Prof. Maria Pia Repetto (repetto@dicca.unige.it) at least 15 days before the evaluation. Candidates must have a reliable Internet connection to allow for the test to be carried out.

**Further information on how to present qualifications/publications**

The application (curriculum) must contain a document (transcript of records) stating the courses followed and marks obtained throughout the candidate's university career (Bachelor and M.Sc.). Candidate whom have not received the M.Sc. degree at the deadline of the public notice can submit further documentation, which they deem more appropriate, in order to document their university career. The knowledge of foreign languages proved by an international certificate (TOEFL, CPE, CAE, FCE, …) and attached to the cv is a preferential title.

**Exam Syllabus**

The interview will be a detailed scientific discussion of the candidate’s research project, his/her Curriculum and his/her qualifications/publications. The interview is also aimed at verifying that the candidate has adequate knowledge to deal with studies in the chosen curriculum.

**Research Themes**

The themes dealt with in the curriculum “Structural and Geotechnical Engineering, Mechanics and Materials” are described in detail on the curriculum web page: http://dottorato.dicca.unige.it/eng/stmatgeo/

In the research project (max 10 pages) the candidate’s interests and related motivations must be highlighted. In addition, it must include a short abstract, the State of the Art and publications and the aims of the activity.

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. One of the referees must be a member of the curriculum (http://dottorato.dicca.unige.it/eng/info/staff/comitatostmatgeo.html) with whom the research project has been agreed. One of the referees must be university professors or experts in the subject. If the referee is an expert in the subject, his/her Curriculum Vitae and a list of publications are also required. It will be the referees’ concern to send reference letters, within the deadline of the public notice, to the doctoral secretariat: dottorato.dicca@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Reference letters that are not presented as requested will not be taken into consideration.

**Foreign Languages**

English

**Further Information**

http://dottorato.dicca.unige.it/eng/

Prof. Maria Pia Repetto
repetto@dicca.unige.it

(*) n. 1 place without grant added on 31.05.2019 with Decree of DICCA Director no. 2030/2019
**Course in: CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING**

**Curriculum: WIND SCIENCE AND ENGINEERING (CODE 7712)**

**Coordinator:** Roberta Massabò  
Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale – DICCA)

**Places:** 1 – **Grants:** 1 (*)

( *) 1 grant funded by DICCA derived from the project ERC AdG 2016 THUNDERR 741273, “Detection, simulation, modelling and loading of thunderstorm outflows to design wind-safer and cost-efficient structures”; The gross annual amount of the scholarship is € 16.500 including social security contributions charged to the scholarship recipient.

**Comparative assessment procedure**

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
</tr>
<tr>
<td>12.7.2019 – 9.00 am at the Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale – DICCA), room A11, via Montallegro 1, Genova.</td>
</tr>
</tbody>
</table>

Should there be a high number of candidates, the interviews will continue on the following day. The interview may also take place electronically (e.g. Skype video conference), on candidates' request, by contacting the doctoral secretarial staff (dottorato.dicca@unige.it) and Prof. Giuseppe Piccardo (giuseppe.piccardo@unige.it). Candidates must have a reliable Internet connection to allow for the test to be carried out.

**Further information on how to present qualifications/publications**

The application (curriculum) must contain a document (transcript of records) stating the courses followed and marks obtained throughout the candidate's university career (Bachelor and M.Sc.).

The knowledge of foreign languages proved by an international certificate (TOEFL, CPE, CAE, FCE, ...) and attached to the cv is a preferential title. Candidate whom have not received the M.Sc. degree at the deadline of the public notice can submit further documentation, which they deem more appropriate, in order to document their university career.

Each candidate must develop a research project on one of the three themes referred to in the 3 grants. (°°)

**Exam Syllabus**

The interview will be a detailed scientific discussion of the candidate’s research project, his/her Curriculum and his/her qualifications/publications. The interview is also aimed at verifying that the candidate has adequate knowledge to deal with studies in the chosen curriculum.

**Research Themes**

In general terms, the themes dealt with in the curriculum "Wind Science and Engineering” are described in detail on the curriculum web page: [http://dottorato.dicca.unige.it/eng/siv/](http://dottorato.dicca.unige.it/eng/siv/)

In the research project (max 10 pages) the candidate’s interests and related motivations must be highlighted. In addition, it must include a short abstract, the State of the Art and publications and the aims of the activity.

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. One of the referees must be a member of the curriculum committee (http://dottorato.dicca.unige.it/eng/info/staff/comitatosiv.html) with whom the research project has been agreed.

These referees must be university professors or experts in the subject. If the referee is an expert in the subject, his/her Curriculum Vitae and list of publications are also required. It will be the referees’ concern to send reference letters, within the deadline of the public notice, to the doctoral secretariat: dottorato.dicca@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Reference letters that are not presented as requested will not be taken into consideration.

**Foreign Languages**

English

**Further Information**

[http://dottorato.dicca.unige.it/eng/](http://dottorato.dicca.unige.it/eng)  
Prof. Giuseppe Piccardo  
giuseppe.piccardo@unige.it

(°°) Information updated on request of the Course Coordinator on 13.05.2019
Course in: DIGITAL HUMANITIES. DIGITAL TECHNOLOGIES, THE ARTS, LANGUAGES, CULTURES AND COMMUNICATION
In agreement with the University of Turin

Curriculum: THE ARTS, PERFORMING ARTS AND MULTIMEDIA TECHNOLOGIES (CODE 7713)

| Coordinator: Adorni Giovanni |
| Department of Modern Languages and Cultures (Dipartimento di Lingue e culture moderne – DLCM) |
| Places: 2 – Grants: 2 (*) |
| (*) 2 grants funded by Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28. |

| Comparative assessment procedure | QUALIFICATIONS/PUBLICATIONS AND EXAMS |
| Written Test | 3.7.2019 – 9.30 am at the Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo (DIRAAS), Aula 8, III piano, Via Balbi 2, Genova. |
| Interview | 10.7.2019 – 10.00 am at the Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo (DIRAAS), Aula 8, III piano, Via Balbi 2, Genova. |

| Comparative assessment procedure | QUALIFICATIONS/PUBLICATIONS AND EXAMS |
| Further information on how to present qualifications/publications | Together with their qualifications, candidates must include a project work on Digital Humanities pertinent to the specific aims of the curriculum. |

| Exam Syllabus | The titles of the dissertations will be chosen, by the candidates, from a series of three given topics; one for each theme listed in the “research themes”. Such themes will be picked out from a shortlist of nine titles (three for each set of theme) prepared by the Board. |

| Research Themes | 1 Critical analysis of ICTs and their applications to visual and performing arts (designing media products, virtual museums, Web 2.0, data banks, repositories, creation of tools necessary for researches and for the dissemination of the researches, platforms for text and film editing, designing and developing of multimedia and Web products with both scientific and informative aims). |
| | 2 Critical reflection on digital technology and its applications to the arts and/or performing arts (technologies in the teaching/learning process; research methods, corpora analysis, multimedia and Web products). |
| | 3 Critical reflection on the effects of ICTs in terms of educational use, contents and research within the specific contexts of the Humanities. |

| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: giovanni.adorni@unige.it, and copy to: migma@unige.it e luisa.zito@unige.it. |
| | The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

| Foreign Languages | Candidates must show their knowledge of at least one foreign language, besides their mother tongue, chosen from English, French and German. Foreign candidates must show their knowledge of Italian. |

| Further Information | The contact person in administration for the doctoral course is Mrs Luisa Zito: luisa.zito@unige.it. |
Course in: DIGITAL HUMANITIES. DIGITAL TECHNOLOGIES, THE ARTS, LANGUAGES, CULTURES AND COMMUNICATION
In agreement with the University of Turin

Curriculum: LANGUAGES, LITERATURES, FOREIGN CULTURES AND TECHNOLOGIES (CODE 7714)

| Coordinator: | Adorni Giovanni |
| Department of modern languages and cultures (Dipartimento di Lingue e culture moderne – DLCM) |
| Places: | 3 |
| Grants: | 2 (*) |

(*) 2 grants funded by Università di Torino, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 17,500.

At the end of the doctoral course, a joint qualification will be awarded by both the Universities of Genova and Turin.

| Comparative assessment procedure | QUALIFICATIONS/PUBLICATIONS AND EXAMS |
| Written Test | 2.7.2019 – 10.00 am presso il Dipartimento di Lingue e Letterature Straniere e Culture Moderne dell’Università degli Studi di Torino, Centro Aldo Moro, Piazzale Aldo Moro, Torino. |
| Interview | 9.7.2019 – 12.00 am presso il Dipartimento di Lingue e Letterature Straniere e Culture Moderne dell’Università degli Studi di Torino, Centro Aldo Moro, Piazzale Aldo Moro, Torino. |

Further information on how to present qualifications/publications
Together with their qualifications, candidates must include a project work on Digital Humanities pertinent to the specific aims of the curriculum.

Exam Syllabus
The titles of the dissertations will be chosen, by the candidates, from a series of three given topics, one for each theme listed in the “research themes”. Such themes will be picked out from a shortlist of nine titles (three for each set of theme) prepared by the Board.

Research Themes
1. Critical analysis of ICTs and their applications to languages and cultures (foreign language and literature teaching methodologies; designing and developing multimedia and Web products; analysis and creation of literary and journalistic corpora, of translations and of specialized texts).
2. Relationships between culture in Spanish and culture in Italian, with particular reference to the new technology aided teaching of Spanish to Italian speaking people.
3. Critical analysis of the effects of ICTs in terms of educational use, contents and research within the specific contexts of the Humanities. The candidates must give examples and substantiate their choices.

Information on references
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: giovanni.adorni@unige.it and copy to: virginia.pulcini@unito.it and luisa.zito@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages
Candidates must show their knowledge of at least one foreign language, besides their mother tongue, chosen from English, French and German. Foreign candidates must show their knowledge of Italian.

Further Information
The contact person in administration for the doctoral course is Mrs Luisa Zito: luisa.zito@unige.it.
Course in: DIGITAL HUMANITIES. DIGITAL TECHNOLOGIES, THE ARTS, LANGUAGES, CULTURES AND COMMUNICATION
In agreement with the University of Turin

Curriculum: LANGUAGES, CULTURES AND DIGITAL TECHNOLOGIES (CODE 7715)

Coordinator: Adorni Giovanni

Department of modern languages and cultures (Dipartimento di Lingue e culture moderne – DLCM)

Places: 4 – Grants: 3 (*)

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

(*) 1 grant co-funded by MIUR/DLCM, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

Comparative assessment procedure

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMS</th>
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</thead>
<tbody>
<tr>
<td>Written Test</td>
</tr>
<tr>
<td>4.7.2019 – 9.30 am the Library of the Department of Modern Languages and Cultures (Dipartimento di Lingue e culture moderne – DLCM), Piazza Santa Sabina 2, Genova.</td>
</tr>
<tr>
<td>Interview</td>
</tr>
<tr>
<td>10.7.2019 – 2.00 pm at the Library of the Department of Modern Languages and Cultures (Dipartimento di Lingue e culture moderne – DLCM), Piazza Santa Sabina 2, Genova.</td>
</tr>
<tr>
<td>Further information on how to present qualifications/publications</td>
</tr>
<tr>
<td>Together with their qualifications, candidates must include a project work on Digital Humanities pertinent to the specific aims of the curriculum.</td>
</tr>
</tbody>
</table>

Exam Syllabus

The titles of the written dissertations will be chosen, by the candidates, from a series of three given topics, one for each theme listed in the “research themes”. Such themes will be picked out from a shortlist of nine titles (three for each set of theme) prepared by the Board.

Research Themes

1 Critical analysis of ICTs and their applications to the Humanities (Designing media products, Applications of Web 2.0, Ontologies, Internet of Things, data banks, creation of tools necessary for researches and for the dissemination of the researches, platforms for text editing, designing and developing of multimedia and Web products with both scientific and informative aims).

2 Critical analysis of digital technology and its applications to languages and cultures (language teaching methodologies and e-learning; researches within the fields of languages, literature and onomastic; designing and developing multimedia and Web products), corpora analysis etc.

3 Critical analysis of the effects of ICTs in terms of educational use, contents and research within the specific contexts of the Humanities.

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: giovanni.adorni@unige.it, and copy to: elisa.bricco@unige.it and luisa.zito@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

Candidates must show their knowledge of at least one foreign language, besides their mother tongue, chosen from English, French and German. Foreign candidates must show their knowledge of Italian.

Further Information

The contact person in administration for the doctoral course is Mrs Luisa Zito: luisa.zito@unige.it.
**Course in:** DIGITAL HUMANITIES. DIGITAL TECHNOLOGIES, THE ARTS, LANGUAGES, CULTURES AND COMMUNICATION  
In agreement with Università di Torino

**Curriculum: LINGUISTICS, APPLIED LINGUISTICS AND ONOMASTICS (CODE 7716)**

| **Coordinator:** Adorni Giovanni  
Department of modern languages and cultures (Dipartimento di Lingue e culture moderne – DLCM) |
|---|
| **Places:** 1 – **Grants:** 1 (*)  
(*) 1 grant funded by Università di Torino, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 17,500. |
| **At the end of the doctoral course, a joint qualification will be awarded by both the Universities of Genova and Torino** |

<table>
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<tr>
<th><strong>Comparative assessment procedure</strong></th>
<th><strong>QUALIFICATIONS/PUBLICATIONS AND EXAMS</strong></th>
</tr>
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<tbody>
<tr>
<td><strong>Written Test</strong></td>
<td>1.7.2019 - 10.00 a.m. Dipartimento di Lingue e Letterature Straniere e Culture Moderne dell'Università degli Studi di Torino, Centro Aldo Moro, Piazzale Aldo Moro, Torino.</td>
</tr>
<tr>
<td><strong>Interview</strong></td>
<td>9.7.2019 - 10.00 am Dipartimento di Lingue e Letterature Straniere e Culture Moderne dell'Università degli Studi di Torino, Centro Aldo Moro, Piazzale Aldo Moro, Torino.</td>
</tr>
<tr>
<td><strong>Further information on how to present qualifications/publications</strong></td>
<td>Together with their qualifications, candidates must include a project work on Digital Humanities pertinent to the specific aims of the curriculum.</td>
</tr>
</tbody>
</table>

**Exam Syllabus**  
The titles of the written dissertations will be chosen, by the candidates, from a shortlist of three titles prepared by the Board.  

**Research Themes**  
Critical analysis of ICTs and their applications to translations with special reference to corpora and their use. Examples, discussions and explanations must be given starting from the linguistic phenomena related to the semantic and syntactic fields; aspects of textuality must be taken into consideration, too.  

**Information on references**  
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: giovanni.adorni@unige.it, and copy to: mario.squartini@unito.it and luisa.zito@unige.it.  
The name, status and service place of the referees chosen by the candidates must be stated in their applications.  

**Foreign Languages**  
Candidates must show their knowledge of at least one foreign language, besides their mother tongue, chosen from English, French and German. Foreign candidates must show their knowledge of Italian.  

**Further Information**  
The contact person in administration for the doctoral course is Mrs Luisa Zito: luisa.zito@unige.it.
Course in: LAW STUDIES

Curriculum: PHILOSOPHY OF LAW AND HISTORY OF LEGAL CULTURE (CODE 7717)

Coordinator: Ivaldi Paola
Department of Law Studies (Dipartimento di Giurisprudenza – DDG)

Places: 3 – Grants: 3 (*)

(*) 2 grants from Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

(*) 1 grant funded by the Department of Law – Dipartimento di Giurisprudenza, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

Comparative assessment procedure

Qualifications/Publications

Further information on how to present qualifications/publications
Candidates must present a research project (max. 10,000 characters including spaces and main references, failure to do so will result in no admission), which can be written in Italian but also in French, English or Spanish (candidate’s choice). In the project, the object, the aims, the phases of the research must be stated and all the bibliographical references considered relevant to the activity, listed. The cv and the attachments must include:
- the qualification with the final degree mark;
- other post lauream qualifications;
- publications (if any);
- researches or training activities/experiences.

Research Themes

- Philosophies of Law
- Legal Reasoning, Logic and Argumentation
- Theories of the Legal Interpretation
- Theory of Legal Sources
- General Theory of Law and State
- Constitutional Interpretation
- Legal Enlightenment and Codification Ideologies
- Philosophy of Crime and Punishment
- Legal Epistemology and Theories of the Legal Science
- Natural Law and Legal Positivism
- Feminist Theories of Law
- Theory of Legal Language
- General Theory of Norms and Normative Systems
- Equality, Poverty, Welfare State, Regulation and Deregulation
- History and Theories of Subjective Rights
- Law, Constitution, and Constitutionalism
- Bioethics and Philosophy of Law
- Sociology of Law and History of Legal-Sociological Thinking
- Law and Social Change
- Law and Culture
- History and Theory of Legal Dogmatics
- History of Legal Culture and Legal Thinking

Information on references
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be
their concern to send reference letters, within the deadline of the public notice, to Prof. Pierluigi Chiassoni at pierluigi.chiassoni@giuri.unige.it and copy to Dott.ssa Stefania Vircillo at stefania.vircillo@giuri.unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

<table>
<thead>
<tr>
<th>Further Information</th>
<th>Contact person for the curriculum</th>
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<tbody>
<tr>
<td></td>
<td>Prof. Pierluigi Chiassoni</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:pierluigi.chiassoni@unige.it">pierluigi.chiassoni@unige.it</a></td>
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<tr>
<th></th>
<th>Contact person in administration</th>
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<tbody>
<tr>
<td></td>
<td>Dott. Stefania Vircillo</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:stefania.vircillo@giuri.unige.it">stefania.vircillo@giuri.unige.it</a></td>
</tr>
</tbody>
</table>
Course in: LAW STUDIES

Curriculum: INTERNATIONAL LAW (COMMERCIAL, EUROPEAN UNION AND INTERNATIONAL LAW) (CODE 7720)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Ivaldi Paola</th>
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</thead>
<tbody>
<tr>
<td>Department of Law Studies (Dipartimento di Giurisprudenza – DDG)</td>
<td></td>
</tr>
<tr>
<td>Places: 3 – Grants: 2 (*)</td>
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<tr>
<td>(*) 1 grant from Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.</td>
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<thead>
<tr>
<th>Modalità</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>15.7.2019 – 3.00 pm at the at Department of Law Studies (Dipartimento di Giurisprudenza), in the meeting room of the former Section of International Law Studies, 3rd floor (n. 7B), via Balbi 22, Genova.</td>
</tr>
<tr>
<td>Further information on how to present qualifications/publications</td>
<td>By qualifications/publications reference is made to the contents of the application and the curriculum vitae et studiorum, the research project, other qualifications/publications. The application and the attached documents can be in Italian or English, French or Spanish.</td>
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</table>

Exam Syllabus

<table>
<thead>
<tr>
<th>Exam Syllabus</th>
<th>The interview will consist in:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- a detailed evaluation of competences in relation to the fundamental thematics concerning, the candidate may choose, one of the following areas: international law, European Union law and commercial law, with particular focus on the research themes indicated below;</td>
<td></td>
</tr>
<tr>
<td>- the discussion of the research project presented.</td>
<td></td>
</tr>
</tbody>
</table>

Research Themes

| Research Themes | Within the doctoral course in international, European Union and commercial law, three research themes are taken into account, which in essence correspond to the disciplinary “areas” (and corresponding “competences”) that are inherent to them. These themes moreover are part of a single framework, characterised by the sharing of the same sources, by a multilevel consolidated protection system and by the multidisciplinarity of the approach. The first research theme concerns the most significant recent developments of international law (both public and private), analysed from the point of view of the widening of guaranteed rights of individuals and their “effective” jurisdictional protection. The same perspective is used with reference to the legal system of the European Union, from which the profiles of institutional law stand out as well as material (common market and other areas of the Union’s competency, including those of external importance). In respect of commercial law, always within the framework of the subject of harmonization with the European Union, special attention will be given to the regulation of banking, financial and insurance intermediaries and to the corporate governance of listed companies. |

Information on references

| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to Prof. Lorenzo Schiano di Pepe at: lorenzo.schianodipepe@unige.it and copy to Dott. M. Stefania Lavezzo, contact person in administration, at: 55563@unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

Foreign Languages

| Foreign Languages | English |

Further Information

| Further Information | During the three years of the Doctorate (and possibly within the second year), Doctoral Students must carry out a study/research period of 12 months abroad, (the period can be split). The 12-month study period can be carried out in Italy in training Institutions known at an international level. The aim of the activity is to improve and deepen the knowledge of the students’ areas of interest. |

| Contact person for the curriculum Prof. Lorenzo Schiano di Pepe | lorenzo.schianodipepe@unige.it |
| Contact person in administration Dott. M. Stefania Lavezzo | 55563@unige.it |
Course in: LAW STUDIES

Curriculum: PRIVATE LAW (LABOUR, PRIVATE, PRIVATE COMPARATIVE AND CIVIL PROCEDURAL LAW) (CODE 7718)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Ivaldi Paola</th>
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</thead>
<tbody>
<tr>
<td>Department of Law Studies (Dipartimento di Giurisprudenza – DDG)</td>
<td></td>
</tr>
<tr>
<td>Places: 3 – Grants: 2 (*)</td>
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</tbody>
</table>

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>11.7.2019 – 10.00 am Dipartimento di Giurisprudenza (DDG) - Diritto privato, IV piano, Sc. A, via Balbi 22, Genova.</td>
</tr>
</tbody>
</table>

The option of a video conferencing interview via Skype is available, candidates intending to participate in a video conferencing interview must send, by 8.7.2019, an email to the following address: Prof. Andrea Fusaro, andrea.fusaro@unige.it

<table>
<thead>
<tr>
<th>Further information on how to present qualifications/publications</th>
<th>By qualifications/publications reference is made to the contents of the application and the curriculum vitae et studiorum, the research project, other qualifications/publications. The application and the attached documents can be in Italian or English, French or Spanish.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam Syllabus</td>
<td>The interview will consist in:</td>
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<tr>
<td></td>
<td>- a detailed evaluation of competences in relation to the fundamental thematics concerning, the candidate may choose, one of the following areas: civil law; comparative private law; labour law; civil procedural law, with particular focus on the research themes indicated below;</td>
</tr>
<tr>
<td></td>
<td>- the discussion of the research project presented.</td>
</tr>
</tbody>
</table>

| Research Themes | Within the doctoral course in civil, corporate and international law, four research themes are taken into account, which in essence correspond to the disciplinary “areas” (and corresponding “competences”) that are inherent to them. These themes moreover are part of a single framework, characterised by the sharing of the same sources, by a multilevel protection system and by the multidisciplinarity of the approach. The first research theme concerns the evolution of the reference frame of contemporary private law, moving from the new order of its sources and from a comparative analysis. With this outlook, the evolutionary lines of the system will be analysed with special reference to two classical themes of civil law, i.e. the contract and civil liability. The second research theme, conversely, deals with the recent developments in comparative private law with special reference to real estate, collateral, property regime of family relations, non-profit organizations. The third research theme concerns labour law and industrial relations, with reference, at the same time, to the overall historical evolution and to the more recent reforms that have weighed on the assets of the discipline, within the framework of social law in the European Union. Finally, the fourth research theme deals with the analysis of the present scenario of civil procedural law also from a comparative point of view - with reference to the introductory phase of the cognizance process, the discussion and the evidential models with the connected problems. |
| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to Prof. Andrea Fusaro at: andrea.fusaro@unige.it and copy to Dott. M. Stefania Lavezzo, contact person in administration, at: 55563@unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications. |
| Foreign Languages | English |

<p>| Further Information | During the three years of the Doctorate (and possibly within the second year), Doctoral Students must carry out a study/research period of 6 months abroad, (the period can be split). The 6-month study can be carried out in Italy in training Institutions known at an international level. The aim of the activity is to improve and deepen the knowledge of the students’ areas of interest. |</p>
<table>
<thead>
<tr>
<th>Contact person for the curriculum</th>
<th>Prof. Andrea Fusaro</th>
<th><a href="mailto:andrea.fusaro@unige.it">andrea.fusaro@unige.it</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact person in administration</td>
<td>Dott. M. Stefania Lavezzo</td>
<td><a href="mailto:55563@unige.it">55563@unige.it</a></td>
</tr>
</tbody>
</table>
Course in: LAW STUDIES

Curriculum: PUBLIC LAW (ADMINISTRATIVE, CONSTITUTIONAL, CRIMINAL, CRIMINAL PROCEDURAL AND TAX LAW) (CODE 7719)

**Coordinator:** Ivaldi Paola  
Department of Law Studies (Dipartimento di Giurisprudenza – DDG)

**Places:** 3 – **Grants:** 2 (*)

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

<table>
<thead>
<tr>
<th>Modalità</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Test</td>
<td>4.7.2019 – 9:00 am at the University of Genova, Aula Cabella (Room Cabella), via Balbi 5, Aula IV, via Balbi 5, 3rd floor/courtyard, Genova. (*)</td>
</tr>
<tr>
<td>Interview</td>
<td>16.7.2019 – 8.30 am at the Department of Law Studies, Sezione penalistica (Section of Criminal Law), via Balbi 30/1, Genova.</td>
</tr>
</tbody>
</table>

**Exam Syllabus**

**WRITTEN TEST:**  
 Constitutional Law:  
- A written test which consists in the drawing up of a comment to a judgement of the Constitutional Court, or of the European Court of Human Rights, or of the European Court of Justice.

Administrative Law:  
- Issues concerning administrative organization, administrative activity and administrative justice.

Criminal Law:  
- Issues concerning the general and special part of Criminal Law.

Criminal Procedure Law:  
- Issues concerning the criminal proceedings, also with reference to the European, international and comparative perspective.

Tax Law:  
- Issues concerning the general and special part of Tax Law.  
- Issues concerning Tax proceedings, also with reference to the European, international and comparative perspective.

**ORAL TEST:**  
The oral test will be a discussion of the written test and the research project, presented by the candidate, coherent with the Research Themes of the curriculum, indicating: starting scientific basis, a basic bibliography, the organization of the thematic profiles to be studies and the expected results. Further elements for evaluation:  
- general knowledge of the sectors of the curricula;  
- aptitude for research.

**Research Themes**

Constitutional Law:  
- Historical and institutional evolution of the contemporary State.  
- Theory of the forms of State and government.  
- Constitutional justice.  
- Constitutionalization process of the European Union and national and supranational protection system of fundamental rights.  
- Sources of domestic, EU and international law.

Administrative Law:  
- Issues related to recent reforms, in the perspective of organization and administration efficiency, defense of legality, simplification towards citizens.  
- Current issues in administrative justice.

Criminal Law:  
- Reform of the criminal code (profiles of the general part and of the special part) also with a view to the unification and strengthening of international instruments of cooperation.  
- Reform of the penalty system.

Criminal Procedural Law:  
- Themes which have been the object of recent legislative measures, in parallel with the evolution of court decisions.  
- Comparative criminal procedural law mainly focussing on the American trial system.
<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>- International Procedural Criminal Law.</td>
<td></td>
</tr>
<tr>
<td>Tax Law:</td>
<td>- Basic Tax Law.</td>
</tr>
<tr>
<td>- International Tax Law and the international contrast of aggressive tax planning.</td>
<td></td>
</tr>
<tr>
<td>Information on references</td>
<td>Reference letters are not required. Nonetheless, any reference letters received will not be taken into consideration for the final score.</td>
</tr>
<tr>
<td>Foreign Languages</td>
<td>English or French or German or Spanish</td>
</tr>
<tr>
<td>Further Information</td>
<td>During the three years of the Doctorate (and possibly within the second year), Doctoral Students must carry out a study/research period of 6 months abroad, (the period can be split). The six month study can be carried out in Italy in training Institutions known at an international level The aim of the activity is to improve and deepen the knowledge of the students’ areas of interest.</td>
</tr>
<tr>
<td>Contact person in administration</td>
<td>Dott. M. Stefania Lavezzo <a href="mailto:55563@unige.it">55563@unige.it</a></td>
</tr>
<tr>
<td>Person in charge of the curriculum</td>
<td>Prof. Marco Pelissero <a href="mailto:marco.pelissero@unito.it">marco.pelissero@unito.it</a></td>
</tr>
</tbody>
</table>

(*) Information added on request of Course Coordinator on 31.05.2019
**Course in: ECONOMICS AND POLITICAL ECONOMY (CODE 7721)**

| **Coordinator:** Bottasso Anna  
Department of Economics (Dipartimento di Economia – DIEC) |  
| **Places:** 6 – **Grants:** 5 (*)  
(* 4 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.  
(*) 1 grant funded by Fondazione AMGA, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28. |  
| **Comparative assessment procedure** | **QUALIFICATIONS/PUBLICATIONS AND INTERVIEW**  
| Interview | 4.7.2019 – 10.00 am at the Department of Economics (Dipartimento di Economia – DIEC), Ufficio Prof.ssa Anna Bottasso piano II, Via Vivaldi 5, Genova.  
The interview may also be held electronically (Skype) should the need arise, on request via email to dottoratodiec@economia.unige.it, bottasso@economia.unige.it |  
| **Further information on how to present qualifications/publications** | The rankings of qualifications/publications will be published on the Department of Economics Website on 01/07/2019 (www.economia.unige.it) |  
| **Exam Syllabus** | Discussione su temi di economia, con particolare riferimento ad argomenti legati al progetto di ricerca presentato. Lettura e traduzione di un testo in inglese. |  
| **Research Themes** | The main research themes concern:  
- microeconomics;  
- macroeconomics;  
- applied economics;  
- political economy;  
- econometrics;  
- statistics;  
- history of economics;  
- history of economic thinking;  
- financial reporting. |  
| **Information on references** | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course Prof. Anna Bottasso at the following addresses: dottoratodiec@economia.unige.it, bottasso@economia.unige.it.  
The name, status and service place of the referees chosen by the candidates must be stated in their applications. |  
| **Foreign Languages** | English |
### Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

### Curriculum: TRANSLATIONAL HAEMATOLOGY (CODE 7722)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Giannini Edoardo Giovanni</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Places:</th>
<th>1 – Grants:</th>
<th>1 (*)</th>
</tr>
</thead>
</table>

(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

### Comparative assessment procedure

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMS</th>
</tr>
</thead>
</table>

#### Written Test

1.7.2019 – 9.00 am at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Aula Antognetti (ex Aula C), viale Benedetto XV 6, 16132 Genova.

#### Interview

1.7.2019 – 2.00 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Aula Antognetti (ex Aula C) viale Benedetto XV 6, 16132 Genova.

#### Exam Syllabus

The written test will be on topics relating to the research themes indicated below. The oral test may include a discussion of the written test and of the candidates’ research programmes / field of interest, also on the basis of their curriculum vitae.

English knowledge will be ascertained with a short reading and translation test.

#### Research Themes

- Innovative therapeutical aspects in the treatment of Large B cell Lymphoma (DLBCL)
- Immunotherapy and its role in the treatment of lymphoproliferative syndromes
- Molecular analysis and study of microenvironment in lymphomas

#### Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address:

Prof. Edoardo Giannini  
Dipartimento di Medicina interna e Specialità mediche (DIMI)  
Viale Benedetto XV 6  
16132 Genova  
egiannini@unige.it  
and to Prof. Roberto Lemoli  
roberto.lemoli@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

#### Foreign Languages

English

#### Further Information

Contact professors:

Prof. Roberto Lemoli  
roberto.lemoli@unige.it

Prof. Michele Cea  
michele.cea@unige.it
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: CLINICAL PATHOPHYSIOLOGY OF ENDOCRINE AND METABOLIC DISORDERS (CODE 7723)

<table>
<thead>
<tr>
<th>Coordinator: Giannini Edoardo Giovanni</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI)</td>
</tr>
<tr>
<td>Places: 1 – Grants: 1 (*)</td>
</tr>
<tr>
<td>(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Test</td>
<td>2.7.2019 – 9.00 am at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI Saletta della Sala Conferenze, viale Benedetto XV 6, Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>2.7.2019 – 2.00 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI, Saletta della Sala Conferenze, viale Benedetto XV 6, Genova.</td>
</tr>
<tr>
<td>Exam Syllabus</td>
<td>The written test will be on topics relating to the research themes indicated below. The oral test may include a discussion of the written test and of the candidates’ research programmes / field of interest, also on the basis of their curriculum vitae.</td>
</tr>
</tbody>
</table>

| Research Themes                  | - Physiopathology of hypophyseal secretions, with special regard to the hypothalamus-somatotropin-prolactin axis and to the IGF1 system. |
|                                  | - Physiopathology of the receptors for somatostatin in neuroendocrine and pituitary tumours. |
|                                  | - Epidemiological and clinical aspects of thyroid nodules even in relation to iodine supply. |
|                                  | - Cellular mechanisms of insulin action and other growth factors. |

| Information on references        | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: |
|                                  | Prof. Edoardo Giannini |
|                                  | Dipartimento di Medicina interna e Specialità mediche (DIMI) |
|                                  | Viale Benedetto XV 6 |
|                                  | 16132 Genova |
|                                  | egiannini@unige.it |
|                                  | and to Prof. Diego Ferone |
|                                  | ferone@unige.it. |
|                                  | The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

| Foreign Languages                | English |

| Further Information              | Contact professors: |
|                                  | Prof. Diego Ferone |
|                                  | ferone@unige.it |
|                                  | Prof. Davide Maggi |
|                                  | davide.maggi@unige.it |
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: CLINICAL PATHOPHYSIOLOGY OF RENAL, CARDIOVASCULAR AND ARTERIAL HYPERTENSIVE DISEASES (CODE 7724)

| Coordinator: Giannini Edoardo Giovanni |
| Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI) |
| Places: 1 – Grants: 0 |

| Comparative assessment procedure | QUALIFICATIONS/PUBLICATIONS AND EXAMS |
| Written Test | 2.7.2019 – 9.00 a.m. at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Saletta della Sala Conferenze, viale Benedetto XV 6, Genova. |
| Interview | 2.7.2019 – 2.00 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Saletta della Sala Conferenze, viale Benedetto XV 6, Genova. |

| Exam Syllabus | The written test will be on topics relating to the research themes indicated below. The oral test may include a discussion of the written test and of the candidates’ research programmes / field of interest, also on the basis of their curriculum vitae, as well the evaluation of the level of English knowledge. |

| Research Themes |
| - Haemodynamic and metabolic mechanisms involved in the development of renal organ and extrarenal damage. |
| - Albuminuria as predictor of renal and cardiovascular damage and light renal dysfunctions. |
| - Biology, pathophysiology and epidemiology of cardiac failure. |
| - Thrombosis and anticoagulation in atrial fibrillation and in acute coronary syndromes. |
| - Atherosclerosis, diabetic nephropathy, chronic kidney disease: role of innate or acquired immunity. |
| - Role of inflammatory mediators in ischemic heart disease, ischemic stroke, in metabolic diseases and their cardiovascular complications |

| Information on references |
| Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: |

Prof. Edoardo Giannini  
Dipartimento di Medicina interna e Specialità mediche (DIMI)  
Viale Benedetto XV 6  
16132 Genova  
egiannini@unige.it  
and to Prof. Francesca Chiara Viazzi  
francesca.viazzi@unige.it  
Prof. Pietro Ameri  
pietroameri@unige.it;  
Prof. Fabrizio Montecucco  
fabrizio.montecucco@unige.it  

The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

| Foreign Languages |
| English |

| Further Information |
| Contact professors: |
| Prof.ssa Francesca Chiara Viazzi  
francesca.viazzi@unige.it  
Prof. Pietro Ameri  
pietroameri@unige.it  
Prof. Fabrizio Montecucco  
fabrizio.montecucco@unige.it  

| 34 |
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: CLINICAL AND EXPERIMENTAL RESPIRATORY PATHOPHYSIOLOGY (CODE 7725)

<table>
<thead>
<tr>
<th>Coordinator: Giannini Edoardo Giovanni</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Internal Medicine and Medical Specialties (Dipartimento di Medicina interna e Specialità mediche – DIMI)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Places: 1 – Grants: 1 (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(*) 1 grant funded by the Università di Genova; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Written Test</strong></td>
<td>2.7.2019 – 9:00 am at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Saletta della Sala Conferenze, viale Benedetto XV 6, Genova.</td>
</tr>
<tr>
<td><strong>Interview</strong></td>
<td>2.7.2019 – 2:00 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Saletta della Sala Conferenze, viale Benedetto XV 6, Genova.</td>
</tr>
</tbody>
</table>

Exam Syllabus

The written test will be on topics relating to the research themes indicated below. The oral test may include a discussion of the written test and of the candidates’ research programmes / field of interest, also on the basis of their curriculum vitae.

<table>
<thead>
<tr>
<th>Research Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Biomarkers and immunological therapy severe asthma</td>
</tr>
<tr>
<td>- Pharmacological therapy of IPF</td>
</tr>
</tbody>
</table>

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: Prof. E. Giannini, Dip. Di Medicina Interna DIMI, viale Benedetto XV n.6, (16132 Genova) e-mail: egiannini@unige.it Prof. Alberto Ballestrero, DIMI, viale Benedetto XV 6, Genova. Or via email to:

Prof. Edoardo Giannini
Dipartimento di Medicina interna e Specialità mediche (DIMI)
Viale Benedetto XV 6
16132 Genova
egiannini@unige.it

and to Prof. Giovanni Passalacqua
passalacqua@unige.it

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

English

Further Information

Contact professors:

Prof. Giovanni Passalacqua
passalacqua@unige.it

Prof.ssa Anna Maria Riccio
anna.maria.riccio@unige.it
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: ONCOLOGIC GENETICS AND MOLECULAR PATHOLOGY (CODE 7726)

| Coordinator: Giannini Edoardo Giovanni |
| Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI) |
| Places: 1 – Grants: 1 (*) |
| (*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28. |

### Comparative assessment procedure

#### QUALIFICATIONS/PUBLICATIONS AND EXAMS

| Written Test | 1.7.2019 – 9:00 am at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Aula Antognetti (ex Aula C), viale Benedetto XV 6, Genova. |
| Interview | 1.7.2019 – 2.00 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Aula Antognetti (ex Aula C), viale Benedetto XV 6, Genova. |

#### Exam Syllabus

The written test will be on topics relating to the research themes indicated below. The oral test may include a discussion of the written test and of the candidates’ research programmes / field of interest, also on the basis of their curriculum vitae.

English knowledge will be ascertained with a short reading and translation test.

#### Research Themes

Morphological, immunohistochemical and molecular determinants in digestive system carcinogenesis with special reference to the correlations between morphology and molecular aspects, to the identification of subjects at risk, to the prognostic aspects and predictions of the response to therapies.

#### Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address:

- Prof. Edoardo Giannini
  Dipartimento di Medicina interna e Specialità mediche (DIMI)
  Viale Benedetto XV 6
  16132 Genova
  egiannini@unige.it
  and to Prof. Paola Ghiorzo
  paola.ghiorzo@unige.it
  and to Prof. Luca Mastracci
  luca.mastracci@unige.it

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

### Foreign Languages

| English |
| Contact professors: |
| Prof.ssa Paola Ghiorzo |
| paola.ghiorzo@unige.it |
| Prof. Luca Mastracci |
| luca.mastracci@unige.it |
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: GERONTOLOGY, PATHOPHYSIOLOGY OF GERIATRIC DISEASES AND ANTI-AGEING MEDICINE (CODE 7727)

| Coordinator: Giannini Edoardo Giovanni |
| Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI) |
| Places: 1 – Grants: 1 (*) |

(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

| Comparative assessment procedure | QUALIFICATIONS/PUBLICATIONS AND EXAMS |
| Written Test | 2.7.2019 – 9.00 am at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Saletta della Sala Conferenze, viale Benedetto XV 6, Genova. |
| Interview | 2.7.2019 – 2.00 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Saletta della Sala Conferenze, viale Benedetto XV 6, Genova. |

Exam Syllabus

The written test will be on topics relating to the research themes indicated below. The oral test may include a discussion of the written test and of the candidates’ research programmes / field of interest, also on the basis of their curriculum vitae.

Research Themes

- Biochemistry of ageing: regulation of i) autophagy, ii) IGF-1 signaling, iii) NAD+ intracellular, iv) sirtuine, v) response to oxidative stress.
- Pathophysiology of fragility in the elderly.
- Ageing and tumours: biology, main clinical problems in the treatment, geriatric profiling of the elderly suffering from cancer.
- Heat restriction and fasting as strategies for the advancement of longevity and for the treatment of diseases: biologic rationale and clinical evidence.

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address:

Prof. Edoardo Giannini  
Dipartimento di Medicina interna e Specialità mediche (DIMI)  
Viale Benedetto XV 6  
16132 Genova  
egiannini@unige.it  
as well as to Prof. Alessio Nencioni  
alessio.nencioni@unige.it  
and to Prof. Fiammetta Monacelli  
fiammetta.monacelli@unige.it

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

English

Further Information

Contact professors:

Prof. Alessio Nencioni  
alessio.nencioni@unige.it

Prof. Fiammetta Monacelli  
fiammetta.monacelli@unige.it
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: AUTOIMMUNE AND AUTOINFLAMMATORY DISEASES: PATHOPHYSIOLOGICAL AND DIAGNOSTIC ASPECTS (CODE 7729)

Coordinator: Giannini Edoardo Giovanni

Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI)

Places: 1 (°) – Grants: 0

(°) The PhD student will work on the project “Development and testing of anti-eNAMPT neutralizing monoclonal antibodies” (ESR13) of the MSCA-ITN-ETN initiative INTEGRATA (GA 813284). He/she will be contractually employed for 36 months by Novimmune (https://www.novimmune.com/en/swiss-biopharmaceutical-company.html) and will be covered under the Swiss social security scheme. The salary will be paid in accordance with EC Marie Skłodowska-Curie Actions-ITN general conditions (see https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-msca_en.pdf page 80).

Criteria for comparative assessment

QUALIFICATIONS/PUBLICATIONS AND INTERVIEW

Interview 28.6.2019 - 12:00 noon (italian time). The interview will be held via Skype.

Subjects covered during the oral exam/interview

- Logical thinking
- Motivation
- General vision
- Ability to realize an independent project
- Potential for excellence and leadership
- Ability to work in a team

Research topics

- NAMPT as a target in Oncology
- Biological roles of extracellular NAMPT/visfatin
- Principles of immunology, in vivo biology, cell culture, flow cytometry, assay development, immunoassays, molecular biology, recombinant protein expression and purification
- Recombinant antibodies and/or phage display

Information on recommendation letters

Candidates will have to indicate not less than one and not more than three referents supporting their candidature. These referents will have to be Academic Professors or experts in the field. Referents will have to send recommendation letters, within the deadline of this call, to the Responsible of the curriculum of Biochemistry of the PhD course in Experimental Medicine, to Prof. Alessio Nencioni, alessio.nencioni@unige.it and to Dr. Krzysztof Masternak, kmasternak@novimmune.com

In the application, candidates will need to indicate name, title and working address of the chosen referents.

Foreign language

English

More Information

Dott. Krzysztof Masternak
kmasternak@novimmune.com

Prof. Alessio Nencioni
alessio.nencioni@unige.it

This position was posted on EURAXESS: https://euraxess.ec.europa.eu/jobs/372951
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: DISEASES OF THE DIGESTIVE SYSTEM AND OF THE LIVER (CODE 7730)

**Coordinator:** Giannini Edoardo Giovanni  
Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI)

**Places:** 1 – **Grants:** 1 (*)

(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Written Test</strong></td>
<td>2.7.2019 – 9.00 am at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Saletta della Sala Conferenze, viale Benedetto XV 6, Genova.</td>
</tr>
<tr>
<td><strong>Interview</strong></td>
<td>2.7.2019 – 2.00 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Saletta della Sala Conferenze, viale Benedetto XV 6, Genova.</td>
</tr>
<tr>
<td><strong>Exam Syllabus</strong></td>
<td>The written test will be on topics relating to the research themes indicated below. The oral test may include a discussion of the written test and of the candidates’ research programmes / field of interest, also on the basis of their curriculum vitae.</td>
</tr>
</tbody>
</table>

**Research Themes**
- Eosinophilic esophagitis: advanced diagnostic techniques and nosographic characterization.
- Gastroesophageal reflux diseases: evaluation of acid and non-acid reflux by means of pH-metry and impedentiometry.
- Approach and diagnosis therapy of chronic inflammatory diseases of the intestine.
- Hierarchical evaluation of possible complications in patients with fatty liver disease (hepatic steatosis)
- Hepatocellular carcinoma: prognostic factors and new therapeutic approaches.
- Structure and physiology of the stomatognathic system: morphology of the different components in relation to function.
- Epidemiology of oral diseases: incidence, preponderance, correlation with the general state of health and with systemic diseases, with special regard to the digestive system.

**Information on references**
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address:

Prof. Edoardo Giannini  
Dipartimento di Medicina interna e Specialità mediche (DIMI)  
Viale Benedetto XV 6  
16132 Genova  
egiannini@unige.it  
and to Prof. Paolo Pera  
paolopera@unige.it

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages**
English

**Further Information**
Contact professors:

Prof. Edoardo G. Giannini  
edoardo.giannini@unige.it

Prof. Paolo Pera  
paolopera@unige.it
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: TRANSLATIONAL ONCOLOGY (CODE 7731)

| Coordinator: Giannini Edoardo Giovanni |
| Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI) |
| Places: 1 – Grants: 1 (*) |

(*) 1 grant co-funded by MIUR/DIMI, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28.

Comparative assessment procedure

| QUALIFICATIONS/PUBLICATIONS AND EXAMS |
| Written Test | 1.7.2019 – 9.00 am at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Aula Antognetti (ex Aula C), viale Benedetto XV 6, Genova. |
| Interview | 1.7.2019 – 2.00 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Aula Antognetti (ex Aula C), viale Benedetto XV 6, Genova. |

Exam Syllabus

The written test will be on topics relating to the research themes indicated below. The oral test may include a discussion of the written test and of the candidates’ research programmes / field of interest, also on the basis of their curriculum vitae. English knowledge will be ascertained with a short reading and translation test.

Research Themes

- Monitoring of solid neoplasias by analyzing circulating nucleic acids.
- Study of the molecular prognostic and predictive factors of the response of solid neoplasias.
- Pre-clinical studies of associations between/among new antineoplastic drugs.
- Pre-clinical and clinical experiments in translational oncology.
- Innovative therapeutic approaches in the treatment of solid tumours and haematological neoplasias.
- Tumour pathology as the pathology of the molecular networks of control.
- Study of the molecular and pathogenic aspects of cardiotoxicity due to antiblastic drugs.

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address:

Prof. Edoardo Giannini
Dipartimento di Medicina interna e Specialità mediche (DIMI)
Viale Benedetto XV 6
16132 Genova
dgiannini@unige.it
and to Prof. Alberto Ballestrero
aballestrero@unige.it
and to Prof. Francesco Boccardo
f.boccardo@unige.it

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

English

Further Information

Contact professors:

Prof. Alberto Ballestrero
aballestrero@unige.it

Prof. Francesco Boccardo
f.boccardo@unige.it

40
| **Course in:** PHYSICS AND NANOSCIENCES  
In agreement with the Istituto Italiano di Tecnologia (IIT - Italian Institute of Technology) |
<table>
<thead>
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<tbody>
<tr>
<td><strong>Curriculum: PHYSICS (CODE 7737)</strong></td>
</tr>
</tbody>
</table>
| **Coordinator:** Ferrando Riccardo  
Dipartimento di Fisica (DIFI) |
| **Places:** 9  
**Grants:** 8 (*)  
(*) 6 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28. |
|  
(**) 1 grant funded by the National Institute of Nuclear Physics (Istituto Nazionale di Fisica Nucleare – INFN), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28. |
|  
(*) 1 grant co-funded by MIUR/DIFI, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28. |
| **Comparative assessment procedure** | QUALIFICATIONS/PUBLICATIONS AND INTERVIEW |
| **Interview** | 8.7.2019 – 9:00 am at the Department of Physics (Dipartimento di Fisica – DIFI), via Dodecaneso 33, Genova.  
If a candidate has been admitted to the interview but cannot reach in time the place of the exam, the option of a video conferencing interview is available. To request this option it is necessary to send an email by 01/07/2019 to phd@fisica.unige.it.  
The details about the connection will be in the answer to the email request. |
| **Further information on how to present qualifications/publications** | Each candidate must present the research proposal he/she intends to work on during the three-year Doctoral course.  
The research proposal must be written in English: max. of 5000 characters including spaces. |
| **Exam Syllabus** | - Discussion of Qualifications/Publications.  
- Discussion of the 5-year degree course dissertation.  
- Presentation and discussion of the proposed research project.  
- Discussion on Basic Physics topics (general physics, modern physics).  
- Testing the knowledge of the English Language. |
| **Research Themes** | Theoretical and Experimental Physics of Fundamental Interactions.  
Experimental and theoretical Physics of Matter.  
Astronomy and Astrophysics.  
Physics applied to the Environment, to Biology and to Medicine. |
| **Information on references** | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, if possible in English, within the deadline of the public notice, to the Coordinator of the Doctoral Course prof. Riccardo Ferrando at the following addresses: phd@fisica.unige.it.  
If possible, it would be preferable for at least one referee to be from the University/CNR/INFN/IIT.  
The subject of the email must be:  
PHD REFERENCE LETTER – PHYSICS |
| **Foreign Languages** | Excellent knowledge of both spoken and written English.  
A very basic knowledge of Italian is desirable. |
Course in: PHYSICS AND NANOSCIENCES  
In agreement with the Istituto Italiano di Tecnologia (IIT - Italian Institute of Technology)  

Curriculum: BIO-NANOSCIENCES (7736)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Ferrando Riccardo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Physics (Dipartimento di Fisica – DIFI)</td>
<td></td>
</tr>
<tr>
<td><strong>Places</strong>:</td>
<td>4 – <strong>Grants</strong>: 3 (*)</td>
</tr>
<tr>
<td>(*) 3 grants funded by the Istituto Italiano di Tecnologia (IIT - Italian Institute of Technology), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16,500.00.</td>
<td></td>
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</table>

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<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>8.7.2019 – 9.00 am at the Department of Physics (Dipartimento di Fisica – DIFI), via Dodecaneso 33, Genova.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Further information on how to present qualifications/publications</th>
<th>Each candidate must present the research proposal he/she intends to work on during the three-year Doctoral course. The research proposal must be written in English: max. of 5000 characters including spaces.</th>
</tr>
</thead>
</table>
| Exam Syllabus | - Discussion of Qualifications/Publications.  
- Discussion of the 5-year degree course dissertation.  
- Presentation and discussion of the proposed research project.  
- Discussion on Basic Physics topics (general physics, modern physics).  
- Testing the knowledge of the English language. |

| Research Themes | 1) Augmented Expansion Microscopy.  
2) Label-free nanoscopy based on polarized light scattering of biological macromolecules.  
3) Label free transient absorption, multi photon and second harmonic generation microscopy approaches towards label free investigations.  
4) Super resolution mapping of GABA-A receptors by STED coupled to two-photon precise uncaging of photoactivatable GABA coupled to single molecule patch clamp.  
5) Cell membrane processes investigated by means of correlative nanoscopy based on AFM and STED microscopy.  
Further information on research themes: https://www.dropbox.com/s/vkl3a2tvuhdbnl9/diaspro-dottorato-bionanoscienze.pdf?dl=0 |

| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, if possible in English, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: phd@fisica.unige.it  
The subject of the email MUST be: PHD REFERENCE LETTER - BIONANOSCIENCES |

| Foreign Languages | Excellent knowledge of both spoken and written English. A very basic knowledge of Italian is desirable. |
Course in: PHYSICS AND NANOSCIENCES  
In agreement with the Istituto Italiano di Tecnologia (IIT - Italian Institute of Technology)

Curriculum: APPLIED SUPERCONDUCTIVITY (CODICE 7738)

<table>
<thead>
<tr>
<th><strong>Coordinator:</strong> Ferrando Riccardo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Physics (Dipartimento di Fisica – DIFI)</td>
</tr>
</tbody>
</table>

**Places:** 2 – **Borse:** 2 (*)

(*) 1 grant funded by the National Institute of Nuclear Physics (Istituto Nazionale di Fisica Nucleare – INFN), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.

(*) 1 grant funded by Consiglio Nazionale delle Ricerche (CNR), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.

<table>
<thead>
<tr>
<th><strong>Comparative assessment procedure</strong></th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
</table>

| **Interview** | 8.7.2019 – ore 9:00 presso il Dipartimento di Fisica (DIFI), via Dodecaneso 33, Genova. |

Further information on how to present qualifications/publications

Each candidate must present the research proposal he/she intends to work on during the three-year Doctoral course.

The research proposal must be written in English: max. 5000 characters including spaces.

| **Exam Syllabus** | - Discussion of Qualifications/Publications.  
- Discussion of the 5-year degree course dissertation.  
- Presentation and discussion of the proposed research project.  
- Discussion on Basic Physics topics (general physics, modern physics).  
- Testing the knowledge of the English language |

Research Themes

- Study of superconducting materials and their properties; preparation of superconducting materials in the form of thin films; development of ribbons and wires for current transport;  
- Study of dissipative phenomena in superconducting cables; development of superconducting magnets for future accelerators; the study of innovative layouts for superconducting magnets;  
- Study of advanced superconducting devices for radiation detection and electronics for use in physics and astrophysics and in technological applications for IC and security.  

| **Information on references** | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, if possible in English, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: phd@fisica.unige.it  
The subject of the email MUST be: PHD REFERENCE LETTER – APPLIED SUPERCONDUCTIVITY |

Foreign Languages

Excellent knowledge of both spoken and written English.  
A very basic knowledge of Italian is desirable.
Course in: CLINICAL AND EXPERIMENTAL IMMUNOLOGY (CODE 7739)

<table>
<thead>
<tr>
<th>Coordinator: Mingari Maria Cristina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellence Centre for the research and study of molecular communication mechanisms between cells: from basic research to the clinic (Centro di Eccellenza per lo studio dei meccanismi molecolari di comunicazione tra cellule: dalla ricerca di base alla clinica – CEBR)</td>
</tr>
<tr>
<td>Places: 5  – Grants: 4 (*)</td>
</tr>
<tr>
<td>(*) 4 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28.</td>
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</table>

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<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>9.7.2019 – 9:00 am at the Excellence Centre for the research and study of molecular communication mechanisms between cells; from basic research to the clinic (Centro di Eccellenza per lo studio dei meccanismi molecolari di comunicazione tra cellule: dalla ricerca di base alla clinica – CEBR), Sala riunioni (Meeting Room), 1st floor (Building &quot;Clinica Oculistica&quot;), Viale Benedetto XV 9, Genova. For those candidates who have been admitted to the interview and cannot reach the exam venue in time, it is possible to have the interview via Skype by connecting to the contact email <a href="mailto:cembr@unige.it">cembr@unige.it</a> by 5:00 pm of 2/7/2019. The evaluation of the candidates’ qualifications will take place on 08.07.2019 starting from 14.30 The ranking lists will be published after 17.30</td>
</tr>
</tbody>
</table>

| Exam Syllabus | The interview is bound to the candidate’s project and to issues of Experimental and Clinical Immunology English language comprehension test |
| Research Themes | Researches bound to Experimental and Clinical Immunology. |
| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following addresses: eva.baraldi@unige.it and daniela.guelfo@unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications. |
| Foreign Languages | English |
Course in: COMPUTER SCIENCE AND SYSTEMS ENGINEERING  
Doctoral Course in agreement with the Bruno Kessler Foundation (Fondazione Bruno Kessler – FBK)

Curriculum: COMPUTER SCIENCE (CODE 7740)

<table>
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<tr>
<th>Coordinator: Delzanno Giorgio</th>
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<tbody>
<tr>
<td>Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi – DIBRIS)</td>
</tr>
<tr>
<td>Places: 10 – Grants: 8 (*)</td>
</tr>
</tbody>
</table>

(*) 3 grants from the Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.  
(*) 1 grant co-funded on funds by MIUR/DIBRIS, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.  
(*) 3 grants funded by DIBRIS funds (2 grants financed by funds from the project ERC Consolidator Grant 2019 “SLING”, Efficient algorithms for sustainable machine learning, and 1 grant financed by funds from the project AXPO. the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.  
(*) 1 grant financed by ESAOTE/CNR-IMATI. the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.

### Comparative assessment procedure

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
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</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
</tr>
<tr>
<td>3.7.2019 - 9.00 am at the Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi – DIBRIS), Sede di Valletta Puggia, Via Dodecaneso 35, Genova.</td>
</tr>
<tr>
<td>An interview and via video conference is also possible. The date will probably be scheduled on the following days should there be a high number of candidates.</td>
</tr>
</tbody>
</table>

### Further information on how to present qualifications/publications

Suggestions on how to organize the research projects are available on the Doctoral web page at the following link: [http://phd.dibris.unige.it/csse/index.php/how-to-apply](http://phd.dibris.unige.it/csse/index.php/how-to-apply).

### Exam Syllabus

The comparative assessment procedure consists in the evaluation of qualifications/publications and in an interview to assess the knowledge needed to undertake a doctoral course in computer science and a discussion on the candidate’s research proposal.

### Research Themes

The research lines of the Curriculum in Computer Science concern the following macro areas:

- Artificial intelligence and Multi-agent Systems.
- Data Science and Engineering.
- Secure and Reliable Systems.
- Human-Computer Interaction.
- Science and Technology for Health.
- Theory and Algorithms for accurate and efficient large scale machine Learning (research theme bound to ERC project )tema di ricerca relativo a un progetto ERC).
- Analysis and Development of Innovative Methods and Technologies for the Co-Recording, Fusion, Analysis and Visualisation of Ultrasounds and MRI Images to support Diagnoses in Muscular- Skeletal Pathologies as described at the website of the doctoral course available at the link [http://phd.dibris.unige.it/csse/](http://phd.dibris.unige.it/csse/).

Some more specific research projects proposed by DIBRIS research groups are described a the link: [http://phd.dibris.unige.it/csse/index.php/how-to-apply](http://phd.dibris.unige.it/csse/index.php/how-to-apply).

Research projects which do not refer to the specific themes listed above will be taken into consideration as long as they are within the research lines of the Doctoral Course.

### Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: phd.compsci@dibris.unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

### Foreign Languages

English

### Further Information

Coordinator of the Doctoral Course  
Prof. Giorgio Delzanno  
DIBRIS Via Dodecaneso 35, Genova  
(+39) 0103536603 giorgio.delzanno@unige.it
Course in: COMPUTER SCIENCE AND SYSTEMS ENGINEERING
Doctoral Course in agreement with the Bruno Kessler Foundation (Fondazione Bruno Kessler – FBK)

Curriculum: SYSTEMS ENGINEERING (CODE 7741)

**Coordinator:** Delzanno Giorgio

Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi – DIBRIS)

**Places:** 6 – **Grants:** 5 (**) (*°°°)

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

(**) 2 grants funded by the Fondazione CIMA (CIMA Foundation), one of which funded by Fondazione CIMA and Istituto Nazionale Di Oceanografia e di Geofisica Sperimentale – OGS, within the project “HPC Training and Research for Earth Sciences” (HPC-TRES1) [https://www.inogs.it/it/content/hpc-training-and-research-earth-sciences-hpc-tres] (**°). The annual gross amount of the grants, including social security expenses to be paid by the recipient, is € 15,343.28.

(*) 1 grant funded by AizoOn. The annual gross amount of the grants, including social security expenses to be paid by the recipient, is € 16,500.00.

<table>
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<tr>
<th>Comparative assessment procedure</th>
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</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
<td>3.7.2019 - 9.00 am at the Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi – DIBRIS), Via Opera Pia 13, Genova. An interview via video conference (Skype) is also possible. The date will probably be scheduled on the following days should there be a high number of candidates.</td>
</tr>
<tr>
<td><strong>Further information on how to present qualifications/publications</strong></td>
<td>Suggestions on how to organize the research projects are available on the Doctoral web page at the following link: <a href="http://phd.dibris.unige.it/csse/index.php/how-to-apply">http://phd.dibris.unige.it/csse/index.php/how-to-apply</a>.</td>
</tr>
<tr>
<td><strong>Exam Syllabus</strong></td>
<td>The comparative assessment procedure consists in the evaluation of qualifications/publications and in an interview on theoretical and/or practical contents concerning the research themes indicated below and the on the candidate’s research activities of interest.</td>
</tr>
<tr>
<td><strong>Research Themes</strong></td>
<td>The research lines of the Syllabus in Systems Engineering concern the main sectors of Systems Engineering, i.e.: - modelling of dynamic systems; - patterns and algorithms for the optimization of performances; - design and development of regulating methods and patterns; - planning at different decisional levels; - monitoring and supervision. More detailed information on specific thematics is described on the Web page: <a href="http://phd.dibris.unige.it/csse/index.php/how-to-apply">http://phd.dibris.unige.it/csse/index.php/how-to-apply</a>. Research projects that do not refer to the specific themes mentioned on the abovementioned Web page are accepted as long as they are included in the research lines of the Doctoral course specified above.</td>
</tr>
<tr>
<td><strong>Information on references</strong></td>
<td>Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: <a href="mailto:phd.compsci@dibris.unige.it">phd.compsci@dibris.unige.it</a>. The name, status and service place of the referees chosen by the candidates must be stated in their applications. A template of a reference letter is available on the Doctoral web page at the following link: <a href="http://phd.dibris.unige.it/csse/index.php/how-to-apply">http://phd.dibris.unige.it/csse/index.php/how-to-apply</a>.</td>
</tr>
<tr>
<td><strong>Foreign Languages</strong></td>
<td>English</td>
</tr>
<tr>
<td><strong>Further Information</strong></td>
<td>Coordinator of the Doctoral Course Prof. Giorgio Delzanno DIBRIS, Via Dodecaneso 35 Genova (+39) 0103536603 <a href="mailto:giorgio.delzanno@unige.it">giorgio.delzanno@unige.it</a> Contact person for the curriculum Prof. Simona Sacone</td>
</tr>
</tbody>
</table>
DIBRIS Via All'Opera Pia, 13 Genova
(+39) 0103532804
simona.sacone@unige.it

(*) 1 grant added on 16.05.2019, with resolution of the DIBRIS Board dated 13.05.2019
(**) 1 grant added on 11.06.2019 due to agreement between DIBRIS and AizoOn signed on 6.6.2019
Course in: COMPUTER SCIENCE AND SYSTEMS ENGINEERING  
Doctoral Course in agreement with the Bruno Kessler Foundation (Fondazione Bruno Kessler – FBK)

Curriculum: SECURE AND RELIABLE SYSTEMS (CODE 7742)

<table>
<thead>
<tr>
<th>Coordinator: Delzanno Giorgio</th>
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<tr>
<td>Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi – DIBRIS)</td>
</tr>
<tr>
<td><strong>Places:</strong> 6 (<em>) – <strong>Grants:</strong> 4 (</em>)</td>
</tr>
</tbody>
</table>

(*) 3 grants funded by the Bruno Kessler Froundation (Fondazione Bruno Kessler – FBK), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

(*) 1 grant funded by Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

(*) 1 place with no grant but a three-year long research grant from CNR-IMATI within the European Project “Secure Intelligent Methods for Advanced RecoGnition of malware and stegomalware – SIMARGL” (bando H2020-SU-ICT-2018).

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
<td>3.7.2019 - 9.00 am at the Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi – DIBRIS), Sede di Valletta Puggia, Via Dodecaneso 35, Genova.</td>
</tr>
<tr>
<td></td>
<td>An interview via video conference (Skype) is also possible.</td>
</tr>
<tr>
<td></td>
<td>The date will probably be scheduled on the following days should there be a high number of candidates.</td>
</tr>
<tr>
<td><strong>Further information on how to present qualifications/publications</strong></td>
<td>Suggestions on how to organize the research projects are available on the Doctoral web page at the following link: <a href="http://phd.dibris.unige.it/csse/index.php/how-to-apply">http://phd.dibris.unige.it/csse/index.php/how-to-apply</a>.</td>
</tr>
</tbody>
</table>

| Exam Syllabus | The comparative assessment procedure consists in the evaluation of qualifications/publications and in an interview on theoretical and/or practical contents concerning the research themes indicated below and the on the candidate’s research activities of interest. |

<table>
<thead>
<tr>
<th>Research Themes</th>
<th>The research themes of FBK concern:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Formal Methods for Requirements Validation of Resilient Systems (TBC)</td>
</tr>
<tr>
<td></td>
<td>- Identity Management for Digital Financial Infrastructures.</td>
</tr>
<tr>
<td></td>
<td>- Security Testing of Smart Contracts.</td>
</tr>
<tr>
<td></td>
<td><strong>The research themes of CNR-IMATI concern:</strong></td>
</tr>
<tr>
<td></td>
<td>- Information Hiding e steganographic Malware (**)</td>
</tr>
</tbody>
</table>

| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: phd.compsci@dibris.unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

| Foreign Languages | English |

<table>
<thead>
<tr>
<th>Further Information</th>
<th>Coordinator of the Doctoral Course</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prof. Giorgio Delzanno</td>
</tr>
<tr>
<td></td>
<td>DIBRIS Via Dodecaneso 35 16146 Genova</td>
</tr>
<tr>
<td></td>
<td>(+39) 0103536603</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:giorgio.delzanno@unige.it">giorgio.delzanno@unige.it</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FBK contact person</th>
<th>Dott. Mariano Ceccato</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FBK Trento Via Sommarive 18, Trento</td>
</tr>
<tr>
<td></td>
<td>(+39) 0461314577 - <a href="mailto:ceccato@fbk.eu">ceccato@fbk.eu</a></td>
</tr>
<tr>
<td></td>
<td>Dott. Silvio Ranise - <a href="mailto:ranise@fbk.eu">ranise@fbk.eu</a></td>
</tr>
<tr>
<td></td>
<td>Dott. Marco Bozzano - <a href="mailto:bozzano@fbk.eu">bozzano@fbk.eu</a></td>
</tr>
<tr>
<td></td>
<td>Dott. Roberto Carbone – <a href="mailto:carbone@fbk.eu">carbone@fbk.eu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CNR-IMATI contact person</th>
<th>Ing. Luca Caviglione - <a href="mailto:luca.caviglione@ge.imati.cnr.it">luca.caviglione@ge.imati.cnr.it</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>CNR- IMATI Via de Marini 6, Genova (**)</td>
<td></td>
</tr>
</tbody>
</table>

(**) Information updated on 16.05.2019 on request of the Course Coordinator
Course in: MODELS, MACHINES AND SYSTEMS ENGINEERING FOR ENERGY, THE ENVIRONMENT AND TRANSPORT

Curriculum: MACHINE AND SYSTEMS ENGINEERING FOR ENERGY, THE ENVIRONMENT AND PROPULSION (CODE 7743)

Coordinator: Cianci Roberto

Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti – DIME)

Places: 6 (*) – Grants: 4 (*) (°°)

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.

(*) 1 grant co-funded by MIUR/DIME, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.

(*) 1 grant funded by DIME, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28. (°°)

(*) 1 reserved place to FPZ SpA employees (°°)

Comparative assessment procedure

QUALIFICATIONS/PUBLICATIONS

Further information on how to present qualifications/publications

Contact Prof. Andrea Cattanei, cattanei@unige.it

Research Themes

The research themes of the Curriculum concern the production of energy and aircraft propulsion. They are experimental, numeric and theoretical and concern:

1. Turbo machines and combustors for the generation of energy and aircraft propulsion:
   - flow analysis in plant components and turbo machines;
   - design of tractor and operating turbo machines;
   - unsteady aerodynamics of burners for turbo gas plants;
   - mechanisms generating aerodynamic noise in turbo machines;
   - studio dei processi di combustione study of combustion processes.

2. Internal combustion engines for automobile traction and marine propulsion:
   - analysis of road vehicle emissions and models of the diffusion of pollutants in the environment;
   - study of the functional characteristics of the components of suction and exhaust systems of engines for self traction;
   - advanced air compressing systems for automobile applications;
   - optimization of performance, consumption and polluting emissions of engines for road traction.

3. Systems for the generation of energy based on traditional primary and renewable resources:
   - analysis of the static and dynamic behaviour of energy plants;
   - realisation of simulators in simulated and real time;
   - analysis and optimization of complex and innovative plants for the production of energy.

The themes in question present important links with transport systems, with model features linked to Mathematical Physics and Numerical processing, with the Controls and the handling of signals.

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator at the following address:

Prof. Andrea Cattanei
DIME
Via Montallegro 1
16145 Genova
cattanei@unige.it

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

English
Further Information please contact the Coordinator of the Doctoral Course Prof. Roberto Cianci: roberto.cianci@unige.it, or Prof. Andrea Cattanei cattanei@unige.it.

(*) 1 reserved place added on 11.06.2019 with agreement between DIME and FPZ SpA signed on 31.05.2019; 1 grant added on 11.06.2019 with Decree of the DIME Director of 6.6.2019; 1 place without grant added on 11.06.2019 on request of the Course Coordinator dated 5.6.2019
Course in: MODELS, MACHINES AND SYSTEMS ENGINEERING FOR ENERGY, THE ENVIRONMENT AND TRANSPORT

Curriculum: MATHEMATICAL ENGINEERING AND SIMULATION (CODE 7744)

Coordinator: Cianci Roberto

Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti – DIME)

Places: 3 – Grants: 2 (*)

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28

Comparative assessment procedure

QUALIFICATIONS/PUBLICATIONS

Research Themes

The following research themes are comprised in the curriculum:

1. Continuous and discrete mathematical models of thermo fluid dynamics of energy systems; fluid mechanics and the relative equations. Problems concerning the acoustics and propagation of waves in fluid and solid mediums by means of “analogous instruments”. Metamaterials. The Dirac field in interaction.

2. Methods for the development and analysis of discreet and continuous models for the simulation of systems. Instruments and problems of numerical analysis; development of simulators and federations of simulators for complex systems. Definition of objectives, formalization, implementation solutions, integration, controls, approval, tests, accreditation and execution of real-time, fast-time and slow time models.


5. Development of aggregate and operative programming systems, implemented by means of instruments of finite capacity, with simulation techniques for discrete events. Excellent estimate of the state of linear and non-linear systems.


7. Simulation applied to the military sector, tactic and strategic.

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator at the following address:

Prof. Roberto Cianci
DIME
Via Opera Pia 15
Genova
roberto.cianci@unige.it

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

English

Further Information

For further information please contact the Coordinator of the Doctoral Course Prof. Roberto Cianci: roberto.cianci@unige.it.
Course in: MECHANICAL, ENERGY AND MANAGEMENT ENGINEERING

Curriculum: ECONOMY AND MANAGEMENT (CODE 7745)

Coordinator: Tagliafico Luca Antonio

Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti – DIME)

Places: 1 – Grants: 1 (*)

(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28

Comparative assessment procedure

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</thead>
<tbody>
<tr>
<td>Interview</td>
</tr>
<tr>
<td>9.07.2019 – 10.00 am at the Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti – DIME), MEC section, Via All’Opera Pia 15/a - 16145 Genova.</td>
</tr>
<tr>
<td>Upon a motivated request, the interview may also take place electronically (Skype video conference) by getting in touch in time with the contact person for the curriculum Prof. Silvano Cincotti (<a href="mailto:silvano.cincotti@unige.it">silvano.cincotti@unige.it</a>) and copy to the Coordinator of the Doctoral Course Prof. Luca A. Tagliafico (<a href="mailto:tgl@ditec.unige.it">tgl@ditec.unige.it</a>) specifying the candidate’s name, Skype address and the curriculum he/she is referring to.</td>
</tr>
</tbody>
</table>

Further information on how to present qualifications/publications

Qualifications/publications must contain a detailed explanation and the planning of the development of a possible research project concerning one of the syllabuses of the field Economy and Management (EM.1, EM.2), in order to evaluate the candidate’s ability to organize and carry out research. If admitted to the doctoral course, the candidate will carry out his/her activity within the syllabus chosen for his/her project, but not necessarily on specific activities described in the actual project. The research project (min. 8,000 max. 16,000 strokes including spaces and punctuation) must comprise:

- the research title;
- field state of the art and relative bibliographic references;
- objectives and expected results.

In addition to the documentation that must be submitted by means of the online procedure, the following information, if present, will also be taken into consideration:

- the title of the thesis dissertation of the Specialist/II level Degree/Master of Science/Master of Engineering together with a brief description (max. 4,000 strokes including spaces and punctuation);
- a list of the exams done with the number of credits, marks and syllabuses (max 500 strokes including spaces and punctuation for each course);
- any other qualifications/publications relevant to the application and scientific activity carried out;
- a letter that states aptitude motivations and the advancement expectations of the candidate which prompted the application.

Exam Syllabus

The interview will focus on the discussion of the project, the qualifications presented by the candidate and on all the specific themes bound to the Economy and Management syllabus.

Research Themes

The Economy and Management syllabus (EM) aims at developing quantitative and computational approaches in finance and economics. Two main research themes with the corresponding syllabuses have been singled out for this EM syllabus:

1. EM.1 Specialization Agent-based Computational Economics.

   This syllabus focuses mainly on the use of agent technologies and methodologies for the study of economics and finance, a bottom-up approach that allows for the study of regularities emerging in the economy as a result of the behaviour and interactions of economic agents in artificial economic systems and which adapts better, with respect to traditional dynamic stochastic models, to the development of a realistic representation of the economy. The EM.1 specialization develops skills that can be applied directly to the financial industry, to government and international organizations and to the academic world.

2. EM.2 Specialization Financial Engineering.

   This syllabus focuses on computational econometrics, on data mining, on automated learning and on dynamic stochastic models of financial and economic data, the objective of which is to study the pricing of derivatives and financial assets, as well as risk management, in a non-Gaussian environment and in the presence of extreme events. Furthermore, the syllabus includes innovative themes relative to the management of shares portfolios, such as pair trading and
statistical arbitrage, as well as the emerging theme of high frequency automated trading. The EM.2 specialization develops skills that naturally give access to work opportunities both in the financial and academic fields.

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator Prof. Luca A. Tagliafico at the following address tgl@ditec.unige.it and to the contact person for the curriculum EG, Prof. Silvano Cincotti, at silvano.cincotti@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages**

English

**Further Information**

Coordinator of the MEME Doctoral Course:
Prof. Luca A. Tagliafico
DIME/TEC
via all'Opera Pia 15/A
16145 Genova
(+39) 0103532880
tgl@ditec.unige.it

Contact person for the EM curriculum:
Prof. Silvano Cincotti
DIME/Sezione MIG
via all'Opera Pia 15
16145 Genova
(+39) 0103532080
silvano.cincotti@unige.it
Course in: MECHANICAL, ENERGY AND MANAGEMENT ENGINEERING

Curriculum: TECHNICAL PHYSICS (CODE 7746)

| Coordinator: Tagliafico Luca Antonio |
| Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti – DIME) |
| **Places:** 2 (**) – **Grants:** 1 (*) |

(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28

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Interview

9.7.2019 – 10.00 am at the Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti – DIME), MEC section, Via All’Opera Pia 15/a - 16145 Genova.

Upon a motivated request, the interview may also take place electronically (Skype video conference) by getting in touch in time with the contact person for the curriculum Prof. Francesco Devia, (francesco.devia@unige.it) and copy to the Coordinator of the Doctoral Course Prof. Luca A. Tagliafico (tgl@ditec.unige.it) specifying the candidate’s name, Skype address and the curriculum he/she is referring to (TP).

Further information on how to present qualifications/publications

The qualifications/publications must contain a detailed explanation and the development plan of a possible research project, quoting the Technical Physics (TP) syllabus, and the field (TP.1, TP.2 or TP.3) it refers to, in order to evaluate the candidate’s ability to organize and carry out research. If admitted to the doctoral course, the candidate will generally carry out his/her activity within the syllabus chosen for his/her project, but not necessarily on the specific activities described and planned in the actual project.

Exam Syllabus

The interview will be a discussion of the research project and qualifications/publications presented and on the correlated themes of the TP curriculum.

Research Themes

The TP syllabus – Technical Physics – of the MEME Doctoral Course resumes the historical course of the Doctoral Courses in Technical Physics (first year of activation 1992). It's objective is to train young researchers capable of developing theoretical experimental research in the thermodynamic, thermo-fluid dynamic and transmission of heat sectors; of dealing with research in the energy sector, by means of a suitable methodological approach to the thermodynamic issue; of analysing thermal, acoustic and lighting phenomena which concur in defining both the conditions of environmental well-being, of environmental impact and consequent control possibilities.

The TP curriculum develops research within the following fields:
- TP.1 Physics of buildings and environmental control
  - Components, heating and air-conditioning plants
  - Physics of buildings and environmental control
  - Lighting techniques and applied acoustics.

The theamtics are developed according to the traditional approach of Environmental Technical Physics.

- TP.2 Energetics and Applied Thermo-fluid dynamics
  - Thermodynamic analysis of energy systems
  - Energy sources, vectors and rational consumption of energy
  - Environmental impact of energy systems
  - Single and multiphase thermo-fluid dynamics. Thermophysical properties of materials. Techniques to increase the efficacy of energy processes and thermo-fluid dynamic exchange mechanisms.

The theamtics are developed according to the traditional approach of Industrial Technical Physics.

- TP.3 Nuclear Plants
  The theamtics which characterise Nuclear Plants, within the limits of the available sources, are added to the first two fields, for the innovative application of the functioning principles of nuclear fission plants for the production of electricity and hydrogen and the solution to advanced thermohydraulic problems of the core of thermal and fast fission reactors.

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the contact...
person for the TP curriculum, Prof. Francesco Devia, at the following address
francesco.devia@unige.it and copy to the IMEG Coordinator, Prof. Luca A. Tagliafico, at
tgl@ditec.unige.it. The name, status and service place of the referees chosen by the candidates must be stated in
their applications.

<table>
<thead>
<tr>
<th><strong>Foreign Languages</strong></th>
<th>English</th>
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</table>

| **Further Information** | Coordinator of the Doctoral Course  
Prof. Luca A. Tagliafico  
DIME/TEC  
via all'Opera Pia 15/A  
16145 Genova  
(+39) 0103532880  
tgl@ditec.unige.it |
|-------------------------|---------------------------------------------------------------|
|                         | Contact person for the TP curriculum:  
Prof. Francesco Devia  
DIME/TEC  
via all'Opera Pia 15/A  
16145 Genova  
(+39) 0103532309  
francesco.devia@unige.it |

(**) 1 place without grant added on 11.06.2019 on request of the Course Coordinator on 5.6.2019
Course in: MECHANICAL, ENERGY AND MANAGEMENT ENGINEERING

Curriculum: MECHANICS, MEASUREMENTS AND MATERIALS (CODE 7747)

Coordinator: Tagliafico Luca Antonio
Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti – DIME)

Places: 3
Grants: (*) 1

(*) 1 grant funded by Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28

(*) 1 grant funded by D&D Srl, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28

(*) 1 grant funded by CNR-IMATI and Hyperlean Srl, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28

Comparative assessment procedure

QUALIFICATIONS/PUBLICATIONS AND INTERVIEW

Interview
9.7.2019 – 10.00 am at the Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti – DIME), MEC section, Via All’Opera Pia 15/a - 16145 Genova.

Upon a motivated request, the interview may also take place electronically (Skype video conference) by getting in touch in time with the contact person for the curriculum Prof. Giovanni Berselli, (giovanni.berselli@unige.it) and copy to the Coordinator of the Doctoral Course Prof. Luca A. Tagliafico (tgl@ditec.unige.it) specifying the candidate's name, Skype address and the curriculum he/she is referring to.

Further information on how to present qualifications/publications

The qualifications/publications must contain a detailed explanation and the development plan of a possible research project, quoting the Mechanics, Measurements and Materials (MMM) syllabus, and the field it refers to, in order to evaluate the candidate’s ability to organize and carry out research.

If admitted to the doctoral course, the candidate will generally carry out his/her activity within the syllabus chosen for his/her project, but not necessarily on the specific activities described and planned in the actual project.

Exam Syllabus
The interview will be a discussion of the research project and qualifications/publications presented and on the correlated themes which feature in the MMM curriculum.

Research Themes
The Mechanics, Measurements and Materials (MMM) syllabus focuses on research themes typical of the Macrosectors it refers to. In particular the research themes suggested concern the functional and constructive design sector, CAD, CAE, PLM, PDM, additive manufacturing (polymer-based metals and composites metalli) (machine and material methods in combination), the mechanic behaviour of materials, materials and implants for medical, industrial and marine use, calculus modelling and applications of composite components also for orthotics and biomedical applications, environmental compatibility and recycling, mechanical and mechatronic systems, motor vehicles, railway vehicles, airplanes, mechanical automation, working, raising and transport systems, lubrification, vibrations and noise, sound quality, experimental methods, diagnostics and qualifying of machines and components, monitoring and maintenance, reliability, reverse logistics.

Information on references
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator Prof. Luca Antonio Tagliafico, at the following address tgl@ditec.unige.it and to the contact person for the MMM curriculum, Prof. Giovanni Berselli, at giovanni.berselli@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages
English

Further Information
Coordinator of the Doctoral Course
Prof. Luca Antonio Tagliafico
DIME/TEC
via all’Opera Pia 15/A 16145 Genova
(+39) 0103532880
tgl@ditec.unige.it

Contact person for the MMM Curriculum
Prof. Giovanni Berselli
DIME/MEC
(**) 1 grant added on 11.06.2019 with agreement signed on 7.5.2019 between DIME and D&D Srl; 1 grant added on 11.06.2019 with agreement signed on 7.6.2019 between DIME, CNR e Hyperlean Srl
Course in: MECHANICAL, ENERGY AND MANAGEMENT ENGINEERING
Curriculum: ROBOTICS AND MECHATRONICS (7748)

**Coordinator:** Tagliafico Luca Antonio

Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti – DIME)

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<tr>
<th><strong>Places:</strong> 1 – <strong>Grants:</strong> 1 (*)</th>
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<td>(*) 1 grant co-financed by funds of MIUR/DIME, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.</td>
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</tr>
<tr>
<td></td>
<td>Upon a motivated request, the interview may also take place electronically (Skype video conference) by getting in touch in time with the contact person for the curriculum Prof. Matteo Zoppi (<a href="mailto:matteo.zoppi@unige.it">matteo.zoppi@unige.it</a>) and copy to the Coordinator of the Doctoral Course Prof. Luca A. Tagliafico (<a href="mailto:tgl@ditec.unige.it">tgl@ditec.unige.it</a>) specifying the candidate’s name, Skype address and the curriculum he/she is referring to.</td>
</tr>
</tbody>
</table>

**Further information on how to present qualifications/publications**
The qualifications/publications must contain a detailed explanation and the development plan of a possible research project, quoting the Robotics and Mechatronics (RM) syllabus, and the field it refers to, in order to evaluate the candidate’s ability to organize and carry out research. If admitted to the doctoral course, the candidate will generally carry out his/her activity within the syllabus chosen for his/her project, but not necessarily on the specific activities described and planned in the actual project.

**Exam Syllabus**
The interview will be a discussion of the research project and qualifications/publications presented and on the correlated themes which feature in the RM curriculum.

**Research Themes**
The Robotics and Mechatronics (RM) syllabus focuses on research themes typical of the Macrosectors it refers to. In particular the research themes suggested concern the development of robot and manipulation, switch systems, home automation (domotics), remote manipulation, modular robots and robots for safety, intelligent mini-vehicles, assembly systems, fluid automation; models and simulation of systems for robotics and mechatronics, man-machine interaction, collaborative robotics, cooperative robotics, robot programming, integration of robotic systems, mechatronics for the automatic machine sectors and for the mechanical and marine mechanical industry.

**Information on references**
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator, Prof. Luca Antonio Tagliafico, at the following address tgl@ditec.unige.it and the contact person for the RM curriculum, Prof. Matteo Zoppi, at matteo.zoppi@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages**
English

**Further Information**
Coordinator of the Doctoral Course
Prof. Luca Antonio Tagliafico
DIME/TEC
via all’Opera Pia 15/A
16145 Genova
(+39) 0103532880
tgl@ditec.unige.it

Contact person for the RM Curriculum
Prof. Matteo Zoppi
DIME/MEC
via all’Opera Pia 15/A
16145 Genova
(+39) 0103532964
matteo.zoppi@unige.it
## Course in: MECHANICAL, ENERGY AND MANAGEMENT ENGINEERING

**Curriculum: TECHNOLOGIES AND PLANTS (CODE 7749)**

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Tagliafico Luca Antonio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti – DIME)</td>
<td></td>
</tr>
<tr>
<td><strong>Places</strong>: 1 – <strong>Grants</strong>: 0</td>
<td></td>
</tr>
</tbody>
</table>

### Comparative assessment procedure

**QUALIFICATIONS/PUBLICATIONS**

The qualifications/publications must contain a detailed explanation and the development plan of a possible research project, quoting the Technologies and Plants (TP) syllabus, and the field (TP.1 or TP.2) it refers to, in order to evaluate the candidate’s ability to organize and carry out research. If admitted to the doctoral course, the candidate will generally carry out his/her activity within the syllabus chosen for his/her project, but not necessarily on the specific activities described in the actual project.

<table>
<thead>
<tr>
<th>Further information on how to present qualifications/publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>The qualifications/publications must contain a detailed explanation and the development plan of a possible research project, quoting the Technologies and Plants (TP) syllabus, and the field (TP.1 or TP.2) it refers to, in order to evaluate the candidate’s ability to organize and carry out research. If admitted to the doctoral course, the candidate will generally carry out his/her activity within the syllabus chosen for his/her project, but not necessarily on the specific activities described in the actual project.</td>
</tr>
</tbody>
</table>

### Research Themes

The Technologies and Plants (TP) syllabus focuses on research themes typical of the macrosectors it refers to. It is organized into two specializations:

**TP.1 Processing Technologies and Systems Specialization:**
- Analysis of the variables that influence the mechanical and micro-structural characteristics of welded joints implemented with traditional and innovative techniques.
- Study of the potential of robotic welding plants.
- Singling out of solutions that allow the obtaining of glued joints with adequate characteristics (study of the surface preparation methods, analysis of the behaviour of adhesives in different environmental conditions).
- Study of the problems concerning the fine tuning and monitoring of the processing of metallic and non-metallic materials.
- Study and singling out of construction techniques of moulds for polymeric materials.
- Surface analysis and fine tuning of techniques to obtain the desired degree of finishing and chemical reactivity.

**TP.2 Industrial Plants Specialization:**
- Design and management of production processes.
- Technical and economic assessments of Engineering and industrialization of new products and production cycles.
- Industrial sustainability, quality, safety, remanufacturing, demanufacturing.
- Manufacturing strategies: Lean Manufacturing, World Class Manufacturing, Agile Manufacturing.
- Industrial logistics.
- Life Cycle Assessment of plants and processes.
- Key enabling technology 4.0 for production and industrial plants: simulation, IoT, augmented and virtual realities, manufacturing analytics.

The activities that will be carried out within the doctoral course aim at training young researchers to be capable of developing theoretical and experimental research starting from the analysis of the state of the art and autonomously developing innovative solutions.

### Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator, Prof. Luca A. Tagliafico, at the following address tgl@ditec.unige.it and to the contact person for the TI curriculum, Prof. Carla Gambaro, at gambaro@diptem.unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

### Foreign Languages

**English**

### Further Information

Coordinator of the Doctoral Course:
Prof. Luca A. Tagliafico
DIME/TEC
via all’Opera Pia 15/A
16145 Genova
(+39) 0103532880

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Contact person for the TP curriculum:
Prof. Carla Gambaro
DIME/MIG
via all'Opera Pia 15
16145 Genova
(+39) 0103532889
gambaro@diptem.unige.it
Course in: JOINT DOCTORATE IN INTERACTIVE AND COGNITIVE ENVIRONMENTS (JD ICE)
Doctoral Course in agreement with the Queen Mary University of London and Universidad Carlos III de Madrid

Curriculum: INTERACTIVE AND COGNITIVE ENVIRONMENTS (CODE 7750)

Coordinator: Regazzoni Carlo

Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN)

<table>
<thead>
<tr>
<th>Places</th>
<th>Grants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 – 2 grants from the University</td>
<td>2 (**)</td>
</tr>
</tbody>
</table>

(**) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00.

2 additional places with a grant will be announced by the Queen Mary University of London (QMUL).

Information on how to apply and the relative public notice exam will be published at the link [http://phd-jdice.diten.unige.it/](http://phd-jdice.diten.unige.it/).

Thus, there are overall 4 places available for this course, 4 of which with a grant.

At the end of the course a joint qualification will be awarded with the Queen Mary University of London.

### Comparative assessment procedure

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>interview</td>
</tr>
<tr>
<td>16.7.2019 - 3.00 pm at the Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN), via Opera Pia 11, Genova.</td>
</tr>
</tbody>
</table>

### Further information on how to present qualifications/pubblications

The application shall contain:

a) curriculum vitae et studiorum correctly dated and signed. The CV shall include all the significant information relative to the research themes of the doctoral course for which the candidate is applying. This information should highlight: title of the dissertation of the specialist degree and a synthetic description of it, the list of exams carried out and the relative marks, previous research carried out and/or work experience, any other qualifications obtained, certifications, publications, patents, etc.;

b) the degree diploma certificate (three and five-year degree course). Candidates who have not obtained their degrees in Italy or the UK shall present the documentation of the qualification translated into English and a declaration of worth;

c) a presentation of the Institute that awarded the qualification, containing a description of the selection methods, international and national ranking, typologies of the qualifications awarded, teaching languages, internet site (etc.) (max. 15 lines);

d) if the candidate is not mother tongue English s/he shall present a certificate attesting his/her knowledge of English (e.g. IELTS min: 6.5) obtained in the last three year starting from the date of the application;

e) a signed motivational letter containing a chosen research project and the reasons for the choice (max. 10 pages).

It is important to highlight when presenting the research project, because they will be used as evaluative parameters, the following aspects: relevance to the research themes that appear in the public notice, originality, execution modality, feasibility, clarity of exposition.

An example of an outline on how to present one's research project, which should not exceed 10 pages, is the following:

- Motivations and logic foundation.
- State of the art.
- Objectives.
- Methodology used.
- Preliminary workplan.
- Expected results.
- Bibliography.

### Exam Syllabus

The interview will consist in the illustration of the candidate’s research activities in his/her field of interest, also taking into consideration previous research work mentioned in the candidate’s curriculum vitae et studiorum.

During the interview, the examining commission will assess the candidate’s competences in relation to the specific research themes and his/her mastery of the English language.

Before starting the interview, the candidate must exhibit the same Identity Document attached to the admission application; another valid document may be exhibited if the identification of the candidate is possible.

The option of a video conferencing interview via Skype is available (with previous ID exhibition), candidates intending to participate in a video conferencing interview must send their
request to Prof. Carlo Regazzoni, Coordinator of the Doctorate, to the following email addresses: carlo.regazzoni@unige.it and icephd@dibe.unige.it stating their Skype ID.

**Research Themes**

1) Learning of interaction models from multisensory signals for artificial self aware agents capable of imitative behaviors
2) Multimodal single and collective self awareness agent models for autonomous ground and aerial vehicles
3) Machine learning methods for cognitive AI-enabled radio
4) Electromagnetic diagnostics for biomedical applications
5) Electromagnetic modeling and simulations of interest for low level laser therapies
6) Satellite Networks in the 5G Ecosystem
7) Network Security over smart cities/smart industries
8) Detection and Localization Techniques for UAV and Drones Monitoring
9) Study and implementation of an innovative IoT system for rehabilitation and coaching of post-ictus patients in domestic environment.
10) Electronic skin and haptic feedback for Virtual and Augmented Reality systems
11) Smart embedded sensor data decoding systems for edge computing and IoT.
12) Neuromorphic tactile devices and systems
13) Embedded computing for unmanned systems
14) Intelligent sensor networks and predictive analysis algorithms for optimizing health prevention plans and improving the quality of life at home
15) Probabilistic graphical models and machine learning methods for remote sensing image analysis
16) Machine learning on the edge
17) IoT-enabled architectures and services
18) Smart objects in domotics

Further details on specific themes are available on the website [http://phd-jdice.diten.unige.it/](http://phd-jdice.diten.unige.it/).

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator at the following address: carlo.regazzoni@unige.it ro icephd@dibe.unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

The candidates' aptitude for scientific research should should clearly transpire from the reference letters.

**Foreign Languages**

English

**Further Information**

The Doctoral Course in Interactive and Cognitive Environment belongs to the JOINT Doctorate typology and is organised and coordinated, according to the agreement entered into “COLLABORATION AGREEMENT BETWEEN QUEEN MARY UNIVERSITY OF LONDON AND UNIVERSITÀ DEGLI STUDI DI GENOVA” currently being renewed. The agreement envisages a joint model of coordination of the doctorate, of candidate supervision and mobility. In agreement with what has been stated herein, each winning candidate will be assigned two supervisors, one for each university partner. Candidates who participate in the public notice announced by the University of Genova and who win, and who therefore will have as Primary Institution the UNIGE, will be assigned as Primary Supervisor a UNIGE professor and as Secondary Supervisor a QMUL professor. At the end of the doctorate, those who will have passed the final dissertation successfully, will receive a JOINT qualification signed by both Partner Universities.

Further information at: [http://phd-jdice.diten.unige.it/](http://phd-jdice.diten.unige.it/).
Course in: JOINT DOCTORATE IN INTERACTIVE AND COGNITIVE ENVIRONMENTS (JD ICE)
Doctoral Course in agreement with the Queen Mary University of London and the Universidad Carlos III de Madrid.
The agreement is being drawn up with the Universidad Carlos III de Madrid.

Curriculum: SELF-AWARE AUTONOMOUS SYSTEMS (7751)

Coordinator: Regazzoni Carlo
Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN)

Places: 1 – Grants: 1 (*).

(*) 1 grant from the Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16,500,00.

According to the agreement with the Universidad Carlos III de Madrid (UC3M) signed on 8.6.2018, a co-tutorship can be implemented in order to have a joint degree.

Procedures will be published on line at the following address http://phd-jdice.diten.unige.it/.

Comparative assessment procedure

<table>
<thead>
<tr>
<th>Qualifications/Publications and Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
</tr>
<tr>
<td>16.7.2019 - 3.00 pm computer interview (via Skype) or in person at the Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN), via Opera Pia 11, Genova.</td>
</tr>
</tbody>
</table>

Further information on how to present qualifications/publications

The application shall contain:

a) curriculum vitae et studiorum correctly dated and signed. The CV shall include all the significant information relative to the research themes of the doctoral course for which the candidate is applying. This information should highlight: title of the dissertation of the specialist degree and a synthetic description of it, the list of exams carried out and the relative marks, previous research carried out and/or work experience, any other qualifications obtained, certifications, publications, patents, etc.;

b) the degree diploma certificate (three and five-year degree course). Candidates who have not obtained their degrees in Italy or the UK shall present the documentation of the qualification translated into English and a declaration of worth;

c) a presentation of the Institute that awarded the qualification, containing a description of the selection methods, international and national ranking, typologies of the qualifications awarded, teaching languages, internet site (etc.) (max. 15 lines);

d) if the candidate is not mother tongue English s/he shall present a certificate attesting his/her knowledge of English (e.g. IELTS min: 6.5) obtained in the last three year starting from the date of the application;

e) a signed motivational letter containing a chosen research project and the reasons for the choice (max. 10 pages).

An example of an outline on how to present one's research project, which should not exceed 10 pages, is the following:

- Motivations and logic foundation.
- State of the art.
- Objectives.
- Methodology used.
- Preliminary workplan.
- Expected results.
- Bibliography.

Exam Syllabus

The interview will consist in the illustration of the candidate’s research activities in his/her field of interest, also taking into consideration previous research work mentioned in the candidate’s curriculum vitae et studiorum. During the interview, the examining commission will assess the candidate’s competences in relation to the specific research themes and his/her mastery of the English language. Before starting the interview, the candidate must exhibit the same Identity Document attached to the admission application; another valid document may be exhibited if the identification of the candidate is possible.
The option of a video conferencing interview via Skype is available (with previous ID exhibition), candidates intending to participate in a video conferencing interview must send their request to Prof. Carlo Regazzoni, Coordinator of the Doctorate, to the following email addresses: carlo.regazzoni@unige.it and icephd@dibe.unige.it.

### Research Themes

1. Learning of interaction models from multisensory signals for artificial self-aware agents capable of imitative behaviors
2. Multimodal single and collective self-awareness agent models for autonomous ground and aerial vehicles
3. Machine learning methods for cognitive AI-enabled radio
4. Electromagnetic diagnostics for biomedical applications
5. Electromagnetic modeling and simulations of interest for low level laser therapies
6. Satellite Networks in the 5G Ecosystem
7. Network Security over smart cities/smart industries
8. Detection and Localization Techniques for UAV and Drones Monitoring
9. Study and implementation of an innovative IoT system for rehabilitation and coaching of post-ictus patients in domestic environment.
10. Electronic skin and haptic feedback for Virtual and Augmented Reality systems
11. Smart embedded sensor data decoding systems for edge computing and IoT.
12. Neuromorphic tactile devices and systems
13. Embedded computing for unmanned systems
14. Intelligent sensor networks and predictive analysis algorithms for optimizing health prevention plans and improving the quality of life at home
15. Probabilistic graphical models and machine learning methods for remote sensing image analysis
16. Machine learning on the edge
17. IoT-enabled architectures and services
18. Smart objects in domotics

Further details on specific themes are available on the website [http://phd-jdice.diten.unige.it/](http://phd-jdice.diten.unige.it/).

### Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator at the following addresses: carlo.regazzoni@unige.it, icephd@dibe.unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

The candidates' aptitude for scientific research should clearly transpire from the reference letters.

### Foreign Languages

English

### Further Information

The Doctoral Course on “Self-aware autonomous systems” belongs to the so-called JOINT DOCTORATE: the rules governing the organization, coordination, supervision of the Doctorate and the candidates' mobility are written in the agreement “COLLABORATION AGREEMENT BETWEEN UNIVERSIDAD CARLOS III DE MADRID AND UNIVERSITÀ DEGLI STUDI DI GENOVA”. For this reason, candidates who are given a grant by Università di Genova – in this way Primary Institution- will have as Primary Supervisor a professor from UNIGE and as Secondary Supervisor a professor from UC3M.

At the end of the Doctorate, upon passing the final discussion successfully, Doctoral students will be given a JOINT title, signed by both Universities.

Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES

Curriculum: CLASSICAL PHILOLOGY (CODE 7752)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Salmon Laura</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Italian and Romance languages, Classical Studies, The Arts and Perfoming Arts (Dipartimento di Italianistica, romanistica, antichistica, arti e spettacolo – DIRAAS)</td>
<td></td>
</tr>
<tr>
<td>Places:</td>
<td>8 – Grants: 6 (*)</td>
</tr>
</tbody>
</table>

(*) 5 grants from Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.

(*) 1 grant co-financed by MIUR/DIRAAS funds. The annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.

The number of grants (6) and that of places without grant (2) refers to the doctoral research course in its entirety and not to the single curriculum.

The merit list, of the written test and the final list are one and the same for the entire doctoral course and not the single curricula. Candidates enrolled in more than one curriculum and who have been admitted to the written test may choose which exam to sit on the day of the exam.

### Comparative assessment procedure

#### QUALIFICATIONS/PUBLICATIONS AND EXAMS

<table>
<thead>
<tr>
<th>Written Test</th>
<th>10.7.2019 – 9.00 a.m. at the Dipartimento di Antichistica, Filosofia, Storia (DAFIST), Salone della biblioteca ex-Darificlet, via Balbi 4, 3rd floor, Genova.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>12.7.2019 – 8.30 am at the Dipartimento di Antichistica, Filosofia, Storia (DAFIST), Sezione Ellenica, ground floor, Via Balbi 4, Genova.</td>
</tr>
</tbody>
</table>

#### Further information on how to present qualifications/publications

The 5-year degree dissertation (even if it has not yet been discussed) and any other publications shall be sent in PDF format to Prof. Franco Montanari (franco.montanari@unige.it).

### Exam Syllabus

- The written test will consist in a translation from Latin or Greek (the candidate may choose) with a philological and exegetical commentary.
- The oral test will be an interview during which the candidate will present his/her research project and a discussion of the written test.

Candidates must attach their research project to their applications.

The Teaching Body of the course proposes to direct the graduate student towards a project that it deems more suitable for his/her abilities and skills, as well as being more congruent with the research lines of the Doctoral course.

### Research Themes

- Philology and Greek Literature;
- Philology and Latin Literature;
- Philology and Byzantine Literature;
- Tradition and fortune of the ancient christian text.

### Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following email address: anna.maria.marzocchi@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

### Foreign Languages

During the oral test, for at least two of the abovementioned languages, candidates will have to show sufficient knowledge to translate a passage of a scientific publication.

### Further Information

Candidates are advised to check the classificational list of those admitted before coming to the written test. It will take into account curriculum studiorum, qualifications, publications, the thesis of the five-year degree and the research project.

The classificational list of those admitted to the written test will be published on the website [http://www.dottoratoletturature.unige.net/?op=home](http://www.dottoratoletturature.unige.net/?op=home), by the 3.7.2019.
Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES

Curriculum: PHILOLOGY AND LINGUISTICS OF ITALIAN AND ROMANCE TEXTS (CODE 7753)

**Coordinator**: Salmon Laura

Department of Italian and Romance languages, Classical Studies, The Arts and Performing Arts (Dipartimento di Italianistica, romanistica, antichistica, arti e spettacolo – DIRAAS)

**Places**: 8 – **Grants**: 6 (*)

(*) 5 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

(*) 1 grant financed by MIUR/DIRAAS funds. the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

The number of grants (6) and that of places without grant (2) refers to the doctoral research course in its entirety and not to the single curriculum.

The merit list, of the written test and the final list are one and the same for the entire doctoral course and not the single curricula. Candidates enrolled in more than one curriculum and who have been admitted to the written test may choose which exam to sit on the day of the exam.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMS</th>
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</thead>
<tbody>
<tr>
<td><strong>Written Test</strong></td>
<td>10.7.2019 – 9.00  Dipartimento di Antichistica, Filosofia, Storia (DAFIST), Salone della biblioteca ex-Darficlet, via Balbi 4, 3rd floor, Genova.</td>
</tr>
<tr>
<td><strong>Interview</strong></td>
<td>12.7.2019 – 8.30 am  Dipartimento di Antichistica, Filosofia, Storia (DAFIST), Sezione Ellenica, ground floor, Via Balbi 4, Genova.</td>
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</tbody>
</table>

**Further information on how to present qualifications/publications**

The 5-year degree dissertation (even if it has not yet been discussed) and any other publications shall be sent in PDF format to Prof. Quinto Marini: quinto.marini@unige.it

**Exam Syllabus**

**Written test:** Comment and illustration (and possible translation) of a text in verse or prose; i.e.: Discussion of a theoretical or critical text concerning one of the following subject fields: Italian philology, Italian linguistics, history of the Italian language, Romance philology and linguistics.

**Oral test:** Discussion of the written test and of the candidate’s research project, which s/he must attach to the application.

The Teaching Body of the course proposes to direct the graduate student towards a project that it deems more suitable for his/her abilities and skills, as well as being more congruent with the research lines of the Doctoral course.

**Research Themes**

- Critical and commented editions of Italian literature texts (from the origins to the present day).
- Philology and criticism of Romance texts.
- Italian lexicology and lexicography.
- Comedy, satire, parody: medieval and modern themes and practices.

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following email address: anna.maria.marzocchi@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages**

The translation of a passage from English or French will also be requested during the interview.

**Further Information**

Candidates are advised to check the classificational list of those admitted before coming to the written test. It will take into account curriculum studiorum, qualifications, publications, the thesis of the five-year degree and the research project.

The classificational list of those admitted to the written test will be published on the website [http://www.dottoratoletterature.unige.net/?op=home](http://www.dottoratoletterature.unige.net/?op=home) by the 3.7.2019.
Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES

Curriculum: ITALIAN LITERATURE: TEXTUAL TRADITIONS AND INTERPRETATIONS (CODE 7754)

<table>
<thead>
<tr>
<th>Coordinator: Salmon Laura</th>
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<tbody>
<tr>
<td>Department of Italian and Romance languages, Classical Studies, The Arts and Performing Arts (Dipartimento di Italianistica, romanistica, antichistica, arti e spettacolo – DIRAAAS)</td>
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Comparative assessment procedure

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<td>Interview</td>
</tr>
<tr>
<td>Further information on how to present qualifications/publications</td>
</tr>
</tbody>
</table>

Exam Syllabus

| Written test: |
| Historical and literary comment and illustration of a text in verse or prose concerning one of the following subject fields: |
| - Italian literature; |
| - modern and contemporary Italian literature; |
| - literary theory; |
| - history of Italian literary criticism; |
| - Italian theatre literature. |
| Oral test: |
| Discussion of the written test and of the candidate’s research project, which s/he must attach to the application. |
| The Teaching Body of the course proposes to direct the graduate student towards a project that it deems more suitable for his/her abilities and skills, as well as being more congruent with the research lines of the Doctoral course. |

Research Themes

| - Critical and commented editions of Italian literature texts (from the origins to the present day). |
| - Intertextual and intercultural research themes, from the origins of the “vulgar” literatures to contemporary Italian literature. |
| a) Ligurian workshop from the Sixteenth to the Twentieth Century |
| b) Authors from Mannerism to Romanticism |
| c) The Risorgimento. |
| - Authorial Documents in Liguria. |
| - Italian literature and journalism. |
| - Italian literature and History of the Theatre. |
| - Italian literature and History of Music. |

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following email address: anna.maria.marzocchi@unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

The translation of a passage from English or French will also be requested during the interview.

Further Information

Candidates are advised to check the classificational list of those admitted before coming to the written test. It will take into account curriculum studiorum, qualifications, publications, the thesis of the five-year degree and the research project. The classificational list of those admitted to the written test will be published on the website http://www.dottoratoletterature.unige.net/?op=home by the 3.7.2019.
Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES

Curriculum: ANGLO-GERMAN LITERATURES (CODE 7755)

Coordinator: Salmon Laura
Department of Italian and Romance languages, Classical Studies, The Arts and Perfoming Arts (Dipartimento di Italianistica, romanistica, antichistica, arti e spettacolo – DIRAAS)

Places: 8 – Grants: 6 (*)

(*) 5 grants from Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.
(*) 1 grant financed by MIUR/DIRAAS funds. the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

The number of grants (6) and that of places without grant (2) refers to the doctoral research course in its entirety and not to the single curriculum.
The merit list, of the written test and the final list are one and the same for the entire doctoral course and not the single curricula.
Candidates enrolled in more than one curriculum and who have been admitted to the written test may choose which exam to sit on the day of the exam.

Comparative assessment procedure

QUALIFICATIONS/PUBLICATIONS AND EXAMS

Written Test
10.7.2019 – 9.00 am Dipartimento di Antichistica, Filosofia, Storia (DAFIST), Salone della biblioteca ex-Darificlet, via Balbi 4, 3rd floor, Genova

Interview
12.7.2019 – 8.30 am Dipartimento di Antichistica, Filosofia, Storia (DAFIST), Sezione Ellenica, ground floor, Via Balbi 4, Genova.

Further information on how to present qualifications/publications
The 5-year degree dissertation (even if it has not yet been discussed) and any other publications shall be sent in PDF format to Prof. Luisa Villa: luisa.villa@unige.it.

Exam Syllabus

Written test:
Historical and literary comment and illustration of a text in verse or prose concerning the period from the Nineteenth to the Twentieth Centuries which will be proposed by the candidate in its original language (English, German, Swedish, Danish, Norwegian). Only for English literature an early modern text will be made available.
The use of monolingual dictionaries is allowed. The test may be done in Italian or in English.

Oral test:
Discussion of the written test and of the candidate’s research project, which s/he must attach to the application. The knowledge of two foreign languages will be tested.
The Teaching Body proposes to direct the graduate student towards a project that it deems more suitable for his/her abilities and skills, as well as being more congruent with the research lines of the Doctoral course.

Research Themes
The Doctoral course can accept a vast range research projects, on Anglo-American (19th – 21st centuries), English (16th – 21st centuries), Nordic (18th – 21st centuries), and German (18th – 21st centuries) literature authors and texts.

Fields of particular interest:
- American Studies:
  American Renaissance; poetry and culture between the 19th and 20th centuries; the prose of James Fitzgerald; literature and society in the second Post War period; theatre (and cinema) of the 20th century.

- English Studies:
  Elizabethan and Jacobean theatre; forms and developments of eighteenth century narrative; orientalism in the age of Enlightenment; Sublime aesthetics and poetics; representations of the English aristocracy; Romantics, late Romantics, early Victorians; colonial wars in the Victorian Age; aestheticism and decadence; literary impressionism; late Victorian narrative; Modernism: metropolitan scholars and colonial outskirts; writing, view, visual arts and intertextuality; modernist criticism and metaphysical poetry; urban literature (20th–21st); tradition and innovation in the poetry of the second Post War period; vulnerability, ethics and biopolitics in the novel of the 21st century.

- German Studies:
- Nordic Literatures
Literature and society (19th and 20th centuries). The “irruption of Modernism”; Avant Guard, Decadentism and early Modernism; the crisis of values, the science/faith contrast and “occult revival” of the end of the 19th century. Reception and/or translation of Nordic authors in other European areas; history of the book; relationships between European and Scandinavian authors; reception and translation of European authors in Scandinavia. Poetry and poetic currents; Modernism and Neoclassicism; poetry and new media; theatre and cinema.
Literature for children in the 20th century.

### Information on references
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following email address: anna.maria.marzocchi@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

### Foreign Languages
During the interview, candidates must prove they confidently master the foreign languages used in their research projects. Nonetheless, they must show an advanced level of knowledge of at least one foreign language, and at least an instrumental knowledge of a second foreign language, chosen among those active in the doctoral course (French, English, Polish, Portuguese, Russian, Spanish, Swedish, Norwegian, Danish, German). Students’ whose mother tongue is not Italian will have to show their knowledge of Italian, besides the language/s used in their research projects, which is necessary for a fruitful participation in the didactic activities.

### Further Information
Candidates are advised to check the classificational list of those admitted before coming to the written test. It will take into account curriculum studiorum, qualifications, publications, the thesis of the five-year degree and the research project.

The classificational list of those admitted to the written test will be published on the website [http://www.dottoratoletterature.unige.net/?op=home](http://www.dottoratoletterature.unige.net/?op=home), by the 3.7.2019.
Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES

Curriculum: ROMANCE AND SLAVIC LITERATURES (CODE 7756)

Coordinator: Salmon Laura

Department of Italian and Romance languages, Classical Studies, The Arts and Performing Arts (Dipartimento di Italianistica, romanistica, antichistica, arti e spettacolo – DIRAAS)

Places: 8 – Grants: 6 (*)

(*) 5 grants from Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

(*) 1 grant financed by MIUR/DIRAAS funds. The annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

The number of grants (6) and that of places without grant (2) refers to the doctoral research course in its entirety and not to the single curriculum.

The merit list, of the written test and the final list are one and the same for the entire doctoral course and not the single curricula. Candidates enrolled in more than one curriculum and who have been admitted to the written test may choose which exam to sit on the day of the exam.

Comparative assessment procedure

QUALIFICATIONS/PUBLICATIONS AND EXAMS

Written Test

10.7.2019 – 9.00 am Dipartimento di Antichistica, Filosofia, Storia (DAFIST), Salone della biblioteca ex-Darficlet, via Balbi 4, 3rd floor, Genova.

Interview

12.7.2019 – 8.30 am Dipartimento di Antichistica, Filosofia, Storia (DAFIST), Sezione Ellenica, ground floor, Via Balbi 4, Genova.

Further information on how to present qualifications/publications

The 5-year degree dissertation (even if it has not yet been discussed) and any other publications shall be sent in PDF format to Prof. Luisa Villa: luisa.villa@unige.it.

Exam Syllabus

Written test:

Historical and literary comment and illustration of a text in verse or prose concerning the period from the Nineteenth to the Twentieth Centuries which will be proposed by the candidate in its original language (French, Spanish, Portuguese, Russian, Polish). The use of monolingual dictionaries is allowed. The test may be done in Italian or in English.

Oral test:

Discussion of the written test and of the candidate’s research project, which s/he must attach to the application. The knowledge of two foreign languages will be tested. During the interview, candidates must prove they confidently master the foreign languages used in their research projects. Nonetheless, they must show an advanced level of knowledge of at least one foreign language, and at least an instrumental knowledge of a second foreign language, chosen among those active in the doctoral course (French, English, Polish, Portuguese, Russian, Spanish, Swedish, Danish, Norwegian, German). Students’ whose mother tongue is not Italian will have to show their knowledge of Italian, besides the language/s used in their research projects, which is necessary for a fruitful participation in the didactic activities.

The Teaching Body proposes to direct the graduate student towards a project that it deems more suitable for his/her abilities and skills, as well as being more congruent with the research lines of the Doctoral course.

Research Themes

The Doctoral course can accept a vast range of research projects, on French (17th – 21st centuries), Portuguese and Brazilianian (19th – 21st centuries), Spanish (16th – 21st centuries), Polish (19th – 21st centuries) and Russian (18th – 21st centuries) literature authors and texts.

Fields of particular interest:

French Studies:

Detailed study of single authors, currents and trends from the 17th century to the present day, with special attention for theoretical and poetic features of the 19th century.

Portuguese and Brazilian literature:

Fernando Pessoa and Portuguese Modernism; José Cardoso Pires: Portuguese literature and power during Salazar’s regime; literature and censorship; memory and trauma; the Colonial War; Brazilian Modernism; representations of space in the regional Brazilian novel; literature and the edge: Brazilian favelas; postcolonial studies: African literatures in Portuguese.

Spanish literature:
<table>
<thead>
<tr>
<th>Literature of the crisis: essays and novels in Spain after the defeat of Cuba (1898); urban space in Spanish narrative from the second half of the 19th century to the present day; narrative genres and hybridization in democratic Spain.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin American literatures: Literary figures and myths on the background of the 1898 crisis; metropolitan spaces and violence (20th and 21st centuries); the re-reading of history by means of the narrative fiction of the ‘80s.</td>
</tr>
<tr>
<td>Polish literature and Polish and Russian Jewish literature: Literature of the second half of the 20th and beginning of the 21st centuries, and in particular: identity and genre thematics, female literature, the relationship between literature and history, prison literature, autobiographies. Jewish Studies within the Polish and Ashkenazic ambit, and also Jewish-Polish and Jewish-Italian literature; imagology and forms of self-representation.</td>
</tr>
<tr>
<td>Russian Studies: Humour studies; onomastics; literature and geography: space, travel, identity; female literature; literature and emotions.</td>
</tr>
</tbody>
</table>

**Information on references** Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following email address: anna.maria.marzocchi@unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages** During the interview, candidates must prove they confidently master the foreign languages used in their research projects. Nonetheless, they must show an advanced level of knowledge of at least one foreign language, and at least an instrumental knowledge of a second foreign language, chosen among those active in the doctoral course (French, English, Polish, Portuguese, Russian, Spanish, Swedish, Norwegian, Danish, German). Students’ whose mother tongue is not Italian will have to show their knowledge of Italian, besides the language/s used in their research projects, which is necessary for a fruitful participation in the didactic activities.

**Further Information** Candidates are advised to check the classificational list of those admitted before coming to the written test. It will take into account curriculum studiorum, qualifications, publications, the thesis of the five-year degree and the research project. The classificational list of those admitted to the written test will be published on the website [http://www.dottoratoletterature.unige.net/?op=home](http://www.dottoratoletterature.unige.net/?op=home) by the 3.7.2019.
Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES

Curriculum: SCIENCES OF CLASSICAL STUDIES (CODE 7757)

Coordinator: Salmon Laura

Department of Italian and Romance languages, Classical Studies, The Arts and Perfoming Arts (Dipartimento di Italianistica, romanistica, antichistica, arti e spettacolo – DIRAAAS)

Places: 8 – Grants: 6 (*)

(*) 5 grants from Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

(*) 1 grant financed by MIUR/DIRAAS funds. The annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

The number of grants (6) and that of places without grant (2) refers to the doctoral research course in its entirety and not to the single curriculum.

The merit list, of the written test and the final list are one and the same for the entire doctoral course and not the single curricula. Candidates enrolled in more than one curriculum and who have been admitted to the written test may choose which exam to sit on the day of the exam.

Comparative assessment procedure

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMS</th>
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</thead>
<tbody>
<tr>
<td>Written Test</td>
</tr>
<tr>
<td>10.7.2019 – 9.00 am Dipartimento di Antichistica, Filosofia, Storia (DAFIST), Salone della biblioteca ex-Darficlet, via Balbi 4, 3rd floor, Genova.</td>
</tr>
<tr>
<td>Interview</td>
</tr>
<tr>
<td>12.7.2019 – 8.30 am Sezione Ellenica del Dipartimento Di Antichistica, Filosofia, Storia, ground floor, Via Balbi 4, Genova.</td>
</tr>
<tr>
<td>Further information on how to present qualifications/publications</td>
</tr>
<tr>
<td>The 5-year degree dissertation (even if it has not yet been discussed) and any other publications shall be sent in PDF format to Prof. Franco Montanari (<a href="mailto:franco.montanari@unige.it">franco.montanari@unige.it</a>)</td>
</tr>
</tbody>
</table>

Exam Syllabus

The written test will consist in the dealing of thematics contemplated in the research themes in the light of ancient sources and modern bibliography.

The oral test consists in an interview in which candidates will present their research projects and discuss their written tests.

Candidates shall attach their research project to their application.

The Teaching Body reserves the right to direct the graduate student towards a project that it deems more suitable for his/her abilities and skills, as well as being more congruent with the research lines of the Doctoral course.

Research Themes

- Greek Civilization: historical, political, institutional, social, economic, religious and cultural aspects.
- Roman Civilization: historical, political, institutional, social, economic, religious and cultural aspects.
- Greek and Roman archeology and history of art: archeological research methods.

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following email address: anna.maria.marzocchi@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

English or French or Spanish or German

During the oral test, for at least two of the abovementioned languages, candidates will have to show sufficient knowledge to translate a passage of a scientific publication.

Further Information

Candidates are advised to check the classificational list of those admitted before coming to the written test. It will take into account curriculum studiorum, qualifications, publications, the thesis of the five-year degree and the research project.

The classificational list of those admitted to the written test will be published on the website http://www.dottoratoletterature.unige.net/?op=home, by the 3.7.2019.
Course in: MATHEMATICS AND APPLICATIONS

Curriculum: MATHEMATICS AND APPLICATIONS (CODE 7758)

**Coordinator:** Vigni Stefano
Department of Mathematics (Dipartimento di Matematica – DIMA)

**Places:** 7 – **Grants:** 5 (*)

(*) 4 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

(*) 1 grant co-funded by MIUR/DIMA, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

<table>
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<tr>
<th><strong>Comparative assessment procedure</strong></th>
<th><strong>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
<td>1.7.2019 - 9.00 am at the University of Genova, Department of Mathematics (Dipartimento di Matematica – DIMA), via Dodecaneso 35, 16146 Genova. The interviews may continue on 2.7.2019. Candidates who are interested may request the interview to be done electronically (via Skype) by contacting Prof. Stefano Vigni (<a href="mailto:vigni@dima.unige.it">vigni@dima.unige.it</a>) at least 7 days before the assessment.</td>
</tr>
</tbody>
</table>

| **Exam Syllabus** | The comparative assessment procedure consists in the assessment of qualifications/publications and in interview on the research project presented by the candidate. |

**Further information on how to present qualifications/publications**

Besides the documentation listed in art. 3 of the public notice, candidates must present:

- if available, their 5-year degree thesis (to be uploaded online).

Furthermore:

- their three-year degree and 5-year degree marks should be indicated in their curriculum;
- a research project (2 pages max.) which describes the research theme they intend to work on during the Doctoral Course.

**Research Themes**

- Harmonic and functional analysis.
- Mathematical logic and theory of categories.
- Commutative algebra.
- Complex projective geometry.
- Analytic theory of numbers.
- Arithmetic geometry and algebraic theory of numbers.
- Mathematical formulations of quantum mechanics and field theory
- Probability and mathematical statistics
- Numerical analysis, computational methods and applications

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address:

Prof. Stefano Vigni
Dipartimento di Matematica, Università di Genova via Dodecaneso 35 16146 Genova

or, alternatively, to the email address: vigni@dima.unige.it

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages**

English

**Further Information**

Prof. Stefano Vigni
Dipartimento di Matematica, Università di Genova via Dodecaneso 35 16146 Genova GE
E-mail: vigni@dima.unige.it
Course in: MATHEMATICS AND APPLICATIONS

Curriculum: MATHEMATICAL METHODS FOR THE ANALYSIS OF DATA (CODE 7759)

**Coordinator:** Vigni Stefano  
Department of Mathematics (Dipartimento di Matematica – DIMA)

**Places:** 2  
**Grants:** 2 (*)

(*) 1 grant financed by DIMA on funds of the European Project ERC. “Efficient algorithms for sustainable machine learning” the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28.

(*) 1 grant financed by CNR/IMATI within the project ERC. “Mathematical methods for recognising characteristic parts on the surface of 3D objects” the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28. (°°)

<table>
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<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
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</table>
| Interview                        | 1.7.2019 - 9.00 am at the Università di Genova, Department of Mathematics (Dipartimento di Matematica – DIMA), via Dodecaneso 35, 16146 Genova.  
The interviews may continue on 2.7.2019.  
Candidates who are interested may request the interview to be done electronically (via Skype) by contacting Prof. Stefano Vigni (vigni@dima.unige.it) at least 7 days before the assessment. |

**Exam Syllabus**  
The comparative assessment procedure consists in the assessment of qualifications/publications and in interview on the research project presented by the candidate.

**Further information on how to present qualifications/publications**  
Besides the documentation listed in art. 3 of the public notice, candidates must present:  
- if available, their 5-year degree thesis (to be uploaded online).  
Furthermore:  
- in their curriculum their three-year degree and 5-year degree marks should be indicated;  
- a research project (2 pages max.) which describes the research theme they intend to work on during the Doctoral Course.

**Research Themes**  
**ERC Project:** research theme  
Development and analysis of machine learning methods suitable for big data. More specifically, integrating and combining analysis tools (numerical, harmonic, convex) with probability and high dimensional statistics to have algorithms whose Computational Cost is commensurate with data accuracy.  
**CNR/IMATI research theme:** Integration of methods of analysis of surfaces, possibly endowed with non-geometric information (colour, reflectance, physical properties), with advanced techniques in pattern recognition. The main goal is to study and develop innovative methods for the description and classification of surfaces and for recognising characteristic parts on surfaces. We plan to apply theoretical methods to be developed in this PhD project to themes of interest to the IMATI institute of CNR, in particular in the context of our cultural heritage, for instance, the classification of artefacts and the comparison of decorative (engravings, friezes, etc) and stylistic (lines and characteristic contours) elements that can be found on complete archaeological finds and/or on fragments.

**Information on references**  
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address:

Prof. Stefano Vigni  
Dipartimento di Matematica, Università di Genova  
via Dodecaneso 35 16146 Genova

or, alternatively, to the email address: vigni@dima.unige.it

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages**  
English

**Further Information**  
Prof. Stefano Vigni  
Dipartimento di Matematica, Università di Genova  
via Dodecaneso 35 16146 Genova GE  
E-mail: vigni@dima.unige.it

(°°) 1 grant added on 31.05.2019, following the agreement between DIMA and CNR/IMATI signed on 22.05.2019 and information updated on request of the Course Coordinator on 30.05.2019.
## Course in: EXPERIMENTAL MEDICINE

### Curriculum: BIOCHEMISTRY (CODE 7760)

<table>
<thead>
<tr>
<th>Coordinator: Giambattista Bonanno</th>
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<tbody>
<tr>
<td>Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES)</td>
</tr>
<tr>
<td><strong>Places:</strong> 3 (<em>) – <strong>Grants:</strong> 2 (</em>)</td>
</tr>
</tbody>
</table>

(*) 2 grants from Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

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<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
<td>2.7.2019 – 2.00 pm at the Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES), Biochemistry section, viale Benedetto XV 1, Genova.</td>
</tr>
</tbody>
</table>

| Exam Syllabus | The interview will focus on topics relating to General Biochemistry, the illustration of any of the candidates’ previous experiences in the field of research, for the preparation of their dissertation, or other, and English knowledge will be tested with the reading and translation of a passage from a scientific article. |

| Research Themes | In vitro and in vivo studies on the metabolic effects and of the signal transduction pathway of the new human hormone – abscisic acid |
|-----------------| Design, synthesis and characterization of prodrugs and drugs in the correction of transport defect in CFTR protein in patients suffering from cystic fibrosis. |

| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: Prof. Santina Bruzzone Università degli Studi di Genova Dipartimento di EXPERIMENTAL MEDICINE (DIMES) - Sezione di Biochimica Viale Benedetto XV 1 16132 Genova (+39) 0103538161 or, alternatively, to the email address: santina.bruzzone@unige.it The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

| Foreign Languages | English |

| Further Information | Prof. Santina Bruzzone Università degli Studi di Genova DIMES, Sezione di Biochimica Viale Benedetto XV 1 16132 Genova Tel. (+39) 0103538161 santina.bruzzone@unige.it |

(*) 1 place without grant added on request of the Course Coordinator on 31.05.2019.
Course in: EXPERIMENTAL MEDICINE

Curriculum: PHARMACOLOGY AND TOXICOLOGY (CODE 7761)

| Coordinator: Giambattista Bonanno |
| Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES) |
| Places: 2 – Grants: 2 (*) |
| (*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28. |
| (*) 1 grant co-financed by MIUR/DIMES, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28. |

| Comparative assessment procedure | QUALIFICATIONS/PUBLICATIONS AND INTERVIEW |
| Interview | 1.7.2019 – 10.00 am at the Department of Pharmacy (Dipartimento di Farmacia – DIFAR), Pharmacology and Toxicology Section, III floor viale Cembrano 4, Genova. |
| Exam Syllabus | The interview will focus on topics relating to General and Clinical Pharmacology and General and Special Toxicology, the illustration of any of the candidates’ previous experiences in the field of research or while preparing their dissertation and English knowledge will be tested with the reading and translation of a passage from a scientific article. |
| Research Themes | Neuropharmacology, Neurotoxicology. |
| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following address: |
| | Prof. Ernesto Fedele |
| | Università di Genova |
| | Dipartimento di Farmacia (DIFAR) |
| | Viale Cembrano 4 |
| | 16148 Genova |
| | (+39) 0103532659 |
| | or, alternatively, to the email address: fedele@difar.unige.it. |
| The name, status and service place of the referees chosen by the candidates must be stated in their applications. |
| Foreign Languages | English |
| Further Information | Prof. Ernesto Fedele |
| | Università di Genova |
| | Dipartimento di Farmacia (DIFAR) |
| | Viale Cembrano 4 |
| | 16148 Genova |
| | (+39) 0103532659 |
| | fedele@difar.unige.it |
Course in: EXPERIMENTAL MEDICINE

Curriculum INTERNATIONAL CURRICULUM IN PHARMACOLOGY AND TOSSICOLOGY (CODE 7763)
Curriculum in agreement with Maastricht University, Maastricht, The Netherlands.

Coordinator: Giambattista Bonanno
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES)

Places: 1 – Grants: 1 (*).

(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

At the end of the course a joint qualification will be awarded with Maastricht University, Maastricht, The Netherlands.

An additional grant will be announced by the Maastricht University. The public notice of exam will be published at the address https://www.academictransfer.com/employer/UM/. Thus, there are overall two places available for the curriculum, 2 of which with grants.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>1.7.2019 – 10.00 am at the Department of Pharmacy (Dipartimento di Farmacia – DIFAR), Pharmacology and Toxicology Section, III floor, viale Cembrano 4, 16148 Genova.</td>
</tr>
<tr>
<td>Exam Syllabus</td>
<td>The interview, in English, will focus on the candidate’s previous experiences – if any – in the research context or while preparing the dissertation; there will also be a critical discussion on the project presented by the candidate.</td>
</tr>
</tbody>
</table>

Research Themes
Neuropharmacology, neurotoxicology.

Information on references
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following address:

Prof. Ernesto Fedele
Università di Genova
Dipartimento di Farmacia (DIFAR)
Viale Cembrano 4
16148 Genova
(+39) 0103532659

or, alternatively, to the email address: fedele@difar.unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages
English

Further Information
Prof. Ernesto Fedele
Università di Genova
Dipartimento di Farmacia (DIFAR)
Viale Cembrano 4
16148 Genova
(+39) 0103532659
fedele@difar.unige.it
**Course in:** EXPERIMENTAL MEDICINE

**Curriculum:** MOLECULAR AND CELLULAR PATHOLOGY OF AGE-RELATED DISEASES (CODE 7762)

<table>
<thead>
<tr>
<th>Coordinator: Giambattista Bonanno</th>
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<tbody>
<tr>
<td>Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES)</td>
</tr>
<tr>
<td><strong>Places:</strong> 2 – <strong>Grants:</strong> 2 (*)</td>
</tr>
</tbody>
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(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
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</thead>
<tbody>
<tr>
<td>Interview</td>
<td>3.7.2019 – 10.00 am at the Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES), Pathology Section, via L.B. Alberti 2, Genova.</td>
</tr>
<tr>
<td>Exam Syllabus</td>
<td>Interdisciplinary, experimental, clinical methodologies and pharmaceutical and therapeutic themes concerning the pathology of ageing and age-related diseases.</td>
</tr>
<tr>
<td>Research Themes</td>
<td>- Molecular and cellular alterations in ageing and in neurodegenerative pathologies.</td>
</tr>
<tr>
<td></td>
<td>- Ageing mechanisms of the sense organs.</td>
</tr>
<tr>
<td></td>
<td>- Molecular bases of neoplasias and resistance to drugs.</td>
</tr>
</tbody>
</table>

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following address:

Prof. Cinzia Domenicotti
Università di Genova
DIMES - Patologia Generale
Via Leon Battista Alberti 2
16132 Genova

or, alternatively, to the email address: cinzia.domenicotti@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages**

English

**Further Information**

Prof. Cinzia Domenicotti
Università di Genova
DIMES - Patologia Generale
Via Leon Battista Alberti 2
16132 Genova
(+39) 0103538830
cinzia.domenicotti@unige.it
Course in: NEUROSCIENCES
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: CLINICAL AND EXPERIMENTAL NEUROSCIENCES (CODE 7764)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Schenone Angelo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI)</td>
<td></td>
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</table>
| Places: | 6  
Grants: 4 (*) |

(*) 3 grants from Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

(*) 1 grant financed by DINOGMI funds within the project “Dipartimenti di Eccellenza”, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

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<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
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<tr>
<td>Interview</td>
<td>15.7.2019 – 9.00 am Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOGMI), Multi-media room, piano fondi, largo Paolo Daneo 3, Genova.</td>
</tr>
</tbody>
</table>

Further information on how to present qualifications/publications

The following qualifications/publications will be evaluated in order of importance:
- research programme;
- work experience in research in Neurosciences;
- reference letters;
- degree mark and degree dissertation;
- publications in impacted journals;
- acknowledgments and awards.

Exam Syllabus

Description of the research project the candidates intend to develop during their doctoral course.

Research Themes

a) Neurology: multiple sclerosis and immunemediated neuropathies of the CNS and PNS, neuromuscular disorders, degenerative diseases of the central nervous system, epilepsy, sleep disorders, cerebrovascular diseases, extrapyramidal diseases and Parkinson’s disease.
b) Psychiatry: affective disorders, convulsive obsessive disorder, schizophrenia and manic-depressive psychosis.
c) Genetics of neurological disorders.
d) Developmental neurology: epilepsy, child cerebral palsy, mental retardation, extrapyramidal diseases, autism, neuromuscular disorders.
e) Neuroimages: studies of conventional MR on neurologic and psychiatric diseases.
f) Neuropsychology and neurobiology: cellular and molecular mechanisms of synaptic transmission and plasticity, nanotechnologies applied to neurosciences.
g) Biology of adult stem cells and their application in the treatment of neurological disorders.
h) Neurooncology: cancer stem cells and their role in the development of brain tumors and their pharmacological characterization.

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the contact person for the curriculum in “Clinical and Experimental Neurosciences”:

Prof. Tullio Florio  
Dipartimento di Medicina Interna e specialità Mediche (DiMI)  
Viale Benedetto XV, 2 16132 Genova  
or, alternatively, to the email address: tullio.florio@unige.it  
Or to Dott. Maria Paola Fenu: neurologia@neurologia.unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

English

Further Information

Prof. Tullio Florio  
Dipartimento di Medicina Interna e specialità Mediche (DiMI)  
Viale Benedetto XV, 2 16132 Genova  
tullio.florio@unige.it

Dott. Maria Paola Fenu  
neurologia@neurologia.unige.it
**Course in:** NEUROSCIENCES  
**In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)**  

**Curriculum: NEUROSCIENCES AND NEUROTECHNOLOGIES (CODE 7765)**

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Schenone Angelo</th>
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</thead>
<tbody>
<tr>
<td>Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI)</td>
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**Places:** 9  
(**) 9 grants funded by the Istituto Italiano di Tecnologia (IIT), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16,500.00. (***)

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<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS</th>
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</table>
| Further information on how to present qualifications/publications | The following documentation must be submitted be means of the online procedure according to the guidelines of the public notice:  
 a) title of the degree dissertation;  
b) brief description of the degree dissertation;  
c) list of exams and their marks;  
d) a signed research project concerning one or more of the research themes of the doctoral course object of the application (maximum 10 pages);  
e) the names, status and work place of the referees, at least 1 and not more than three, who must send reference letters about the candidate directly to the following email address: nbtphdcourse@iit.it;  
f) a statement declaring one’s knowledge of English since it is the language of the doctoral course. |

**Research Themes**

Here are listed the titles of research themes; to have an overview of complete research themes abstract go to https://www.iit.it/phd-school.  
1) Cellular mechanisms of perception.  
Tutor: Tommaso Fellin; tommaso.fellin@iit.it  
2) Neurophysiology of light-sensitive interfaces with the visual system: new strategies for retinal prosthetics.  
Tutor: Elisabetta Colombo; elisabetta.colombo@iit.it  
3) Modeling and Molecular Dynamics simulation of neuronal proteins.  
Tutor: Luca Maragliano; luca.maragliano@iit.it  
4) Physiopathology of experimental models of epilepsy and autism spectrum disorder: from causative genes to behavior.  
Tutor: Caterina Michetti; caterina.michetti@iit.it  
5) Circuit dissection of the integrated neurobiological substrates of emotional and motor behaviors, both in health and disease (i.e. Parkinson’s disease).  
Tutor: Raffaella Tonini; raffaella.tonini@iit.it  
6) Cellular determinants of brain circuit development and wiring in health and under stressful conditions.  
Tutor: Laura Cancetta; laura.cancetta@iit.it  
7) Biohybrid Systems for Functional Brain Repair in Temporal Lobe Epilepsy.  
Tutor: Gabriella Panuccio; gabriella.panuccio@iit.it  
8) Engineering a biomimetic extracellular matrix to promote brain regeneration.  
Tutor: Gemma Palazzolo; gemma.palazzolo@iit.it  
9) Nanoscale determinants for synaptic plasticity at inhibitory synapses (***)

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters in pdf format, within the deadline of the public notice, to the contact person for the Curriculum in Neurosciences and Neurotechnologies, Prof. Fabio Benfenati, at the following email address: nbtphdcourse@iit.it.  
The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages**

English

**Further Information**

For further information write to: nbtphdcourse@iit.it

(**) Grant added on 16.05.2019 following the Amendment, to the agreement with IIT for the setting up of XXXV Cycle Ph.D. courses signed by IIT on 15.05.2019  
(***) Information updated on request of the Course Coordinator on 31.05.2019.
Course in: NEUROSCIENCES
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: MOTORY AND SPORTS ACTIVITIES SCIENCES (CODE 7766)

**Coordinator:** Schenone Angelo

Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI)

**Places:** 7 – **Grants:** 5 (*)

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

(*) 3 grants financed by DINOGMI funds (1 grant funded by the project Dipartimenti d’Eccellenza and 2 by the international collaboration agreement signed with Vrije Universiteit Brussel). The annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

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<tbody>
<tr>
<td>Interview</td>
<td>11.7.2019 – 10.00 am presso il Dipartimento di Medicina Sperimentale, (DIMES), Biblioteca di Fisiologia Umana, Viale Benedetto XV 3, Genova</td>
</tr>
</tbody>
</table>

**Further information on how to present qualifications/publications**

The following will be evaluated:
1. Degree mark.
2. Personal curriculum (including the Degree dissertation).
3. Research experience and scientific publications.
4. Research programme presented by the candidate.

**Exam Syllabus**

The interview will deal with the research themes of the curriculum of the Doctoral Course and a discussion concerning the candidate's research programme, which will be evaluated on the basis of content originality, execution modalities, feasibility, its relevance to the themes of the field of research for which this public exam has been announced.

**Research Themes**

The doctoral course will develop research lines concerning the study of:
1. Motory performance, motory learning and sensorimotor integration (the kinematics of movement, postural analysis, electrophysiology of movement and of sensorimotor integration, morphologic and functional imaging).
2. Sports performance (the methodological approach to sports performance, the interaction between physiological parameters and training methods, the relationship between nutrition and sports performance, the interaction between drugs and the physiology of athletic gestures).

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following address:

Send to the kind attention of
Prof. Piero Ruggeri,
Sezione di Fisiologia Umana, Dipartimento di Medicina Sperimentale (DIMES), Viale Benedetto XV, n. 3, 16132 Genova.
ruggeri@unige.it
010-3538185,

Dott. Maria Paola Fenu at: neurologia@neurologia.unige.it (*)

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages**

<table>
<thead>
<tr>
<th>English</th>
</tr>
</thead>
</table>

**Further Information**

Prof. Piero Ruggeri,
Sezione di Fisiologia Umana, Dipartimento di Medicina Sperimentale (DIMES), Viale Benedetto XV, n. 3, 16132 Genova.
ruggeri@unige.it
010-3538185,

(*) Information updated on 8.05.2019 due to clerical error.
Course in: HEALTH SCIENCES

Curriculum: BIOSTATISTICS AND METHODS FOR ANALYSIS OF BIG DATA (CODE 7767)

| **Coordinator:** | Izzotti Alberto |
| **Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL)** |
| **Places:** | 1 – **Grants:** 1.(*) |

(*) 1 grant financed by Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

| **Comparative assessment procedure** | **QUALIFICATIONS/PUBLICATIONS AND EXAMS** |
| **Written Test** | 9.7.2019 – 9.00 am at the Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL), Room A, via Pastore 1, Genova. |
| **Interview** | 9.7.2019 – 12.00 noon at the Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL), Room A, via Pastore 1, Genova. |

**Further information on how to present qualifications/publications**
Please note that by qualifications/publications reference is made to the information in the application and in the curriculum vitae et studiorum, the research project, other qualifications/publications. The latter must not exceed 10 pages each.

| **Exam Syllabus** | The tests will concern topics relating to the research themes. |

| **Research Themes** | 1. Models for the study of prognostic factors, of effect modifiers and surrogate endpoints.  
4. Methodological issues in the quantitative study of the progression of the disease in chronic diseases.  
5. Early prognosis markers and reaction to treatment.  
6. Methods for Big Data analysis |

| **Information on references** | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the contact person of the Doctoral Course Prof. Maria Pia Sormani at the following address: mariapia.sormani@unige.it.  

The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

| **Foreign Languages** | English |
| **Further Information** | Contact person in administration:  
Mr Giuseppe Zara  
giuseppe.zara@unige.it |
# Course in: HEALTH SCIENCES

## Curriculum: EPIDEMIOLOGY AND VACCINE PREVENTION (CODE 7768)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Izzotti Alberto</th>
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<tbody>
<tr>
<td>Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL)</td>
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<tr>
<td><strong>Places:</strong></td>
<td>1 – <strong>Grants:</strong> 1 (*)</td>
</tr>
<tr>
<td>(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28.</td>
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<tbody>
<tr>
<td>Written Test</td>
<td>9.7.2019 – 9.00 am at the Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL), Room A, via Pastore 1, Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>9.7.2019 – 12.00 noon at the Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL), Room A, via Pastore 1, Genova.</td>
</tr>
</tbody>
</table>

**Further information on how to present qualifications/publications**

Please note that by qualifications/publications reference is made to the information in the application and in the curriculum vitae et studiorum, the research project, other qualifications/publications. The latter must not exceed 10 pages each.

### Exam Syllabus

The tests will concern topics relating to the research themes.

2. Immunological response to vaccinal preparations – Design, standardization and evaluation of techniques to determine the humoral response – Determinants of the cell-mediated response – Clinical studies on monovalent and combined, inactivated and attenuated live vaccines, differently adjuvanted, to be administered by injection and mucosally, so as to evaluate safety, tolerability, immunogenicity and efficacy – Association of different vaccinal preparations and use of alternative schedules – studies on files for the evaluation of effectiveness.
3. Role of vaccinations in children and adolescents, adults and the elderly – Detection of rates of vaccine coverage – Monitoring of preventable cases.
4. Regulating and authoritative aspects of vaccines – Ethic evaluations.

### Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the contact person of the Doctoral Course Prof. Giancarlo Icardi at the following address: icardi@unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications.

### Foreign Languages

| English |

### Further Information

Contact person in administration:
Mr Giuseppe Zara
giuseppe.zara@unige.it
Course in: HEALTH SCIENCES

Curriculum: INFECTIOUS AND TROPICAL DISEASES (CODE 7769)

<table>
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<tbody>
<tr>
<td>Written Test</td>
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</tr>
<tr>
<td>Interview</td>
<td>9.7.2019 – 12.00 noon at the Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL), Room A, via Pastore 1, Genova.</td>
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Further information on how to present qualifications/publications
Please note that by qualifications/publications reference is made to the information in the application and in the curriculum vitae et studiorum, the research project, other qualifications/publications. The latter must not exceed 10 pages each.

Exam Syllabus
The tests will concern topics relating to the research themes.

Research Themes
1. Infection in the immunocompromised host: epidemiology, diagnostics and therapy.
2. Antibiotic resistance and nosocomial infections: surveillance, epidemiology and clinical management.
3. HIV infection: immunologic alterations, opportunistic infections, antiretroviral therapy.
4. Chronic HCV- and HBV-related hepatopathy.
5. Tuberculosis: epidemiology and drug resistance.

Information on references
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the coordinator of the Doctoral Course Prof.ssa Malgorzata Mikulska at the following address: M.Mikulska@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages
English

Further Information
Contact person in administration:
Mr Giuseppe Zara
giuseppe.zara@unige.it
Course in: HEALTH SCIENCES

Curriculum: FORENSIC AND OCCUPATIONAL MEDICINE (CODE 7770)

Coordinator: Izzotti Alberto
Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL)

Places: 1 – Grants: 1 (*).

(*) 1 grant co-financed on MIUR/DISSAL funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.

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<tr>
<td>Interview</td>
<td>9.7.2019 – 12.00 noon at the Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL), Room A, via Pastore 1, Genova.</td>
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Further information on how to present qualifications/publications
Please note that by qualifications/publications reference is made to the information in the application and in the curriculum vitae et studiorum, the research project, other qualifications/publications. The latter must not exceed 10 pages each.

Exam Syllabus
The tests will concern topics relating to the research themes.

Research Themes

**Themes for Forensic Medicine:**
1) Management of forensic litigation in healthcare, with special attention to damages due to medical error and to the assessment and prevention of nosocomial infections.
2) Death diagnosis, prevention and research applied to the examination of the cadaver undergoing a diagnostic and judicial post-mortem, with particular reference to sudden deaths caused by cardiac problems and suicides.
3) Examination and assessment of the victim of rape with the application of consolidated multidisciplinary protocols.
4) Examination and assessment of the victim of abuse within the family with special reference to abuse of the elderly, women and children.
5) Individual identification on the living, cadavers and biological traces, by means of DNA.
6) Clinical Forensic Medicine with special assessment of the incapable patient.
7) Evidence Based Medicine applied to Forensic Medicine.

**Themes for Occupational Medicine:**
1) Work hygiene.
2) Assessment and prevention of occupational biological risk, with special reference to the healthcare service.
3) Assessment and prevention of chemical and cancer risks in the work environment, with special reference to the healthcare service.
4) Occupational immunoprophylaxis.
5) Evidence Based Medicine applied to Occupational Medicine.
6) Examination and validation of new digital tools for the epidemiological surveillance of occupational accidents and diseases.
7) Occupational allergology and immunotherapy.
8) Examination and prevention of occupational Obstructive Sleep Apnea Syndrome (OSAS).

Information on references
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the contact person of the Doctoral Course Prof. Francesco De Stefano at the following address: fdestefano@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages
English

Further Information
Contact person in administration:
Mr Giuseppe Zara
giuseppe.zara@unige.it
**Course in:** HEALTH SCIENCES

**Curriculum:** NURSING (CODE 7771)

<table>
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<tr>
<th>Coordinator</th>
<th>Izzotti Alberto</th>
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<tr>
<td>Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL)</td>
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| Further information on how to present qualifications/publications | Please note that by qualifications/publications reference is made to the information in the application and in the curriculum vitae et studiorum, the research project, other qualifications/publications. The latter must not exceed 10 pages each. |

| Exam Syllabus | The tests will concern topics relating to the research themes. |

| Research Themes | 1. Patient safety and error risk prevention in assistance procedures. 2. Prevention, education and assistance of people who suffer from chronic health problems. 3. Family and Patient Centred Care and Child and family Centred Care 4. Innovative training models and methodologies in healthcare. |

| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the contact person of the Doctoral Course Prof. Annamaria Bagnasco all’indirizzo: annamaria.bagnasco@unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

| Foreign Languages | English |

| Further Information | Contact person in administration: Mr Giuseppe Zara giuseppe.zara@unige.it |
Course in: HEALTH SCIENCES

Curriculum: PREVENTION OF CANCER AND OF CHRONIC DEGENERATIVE DISEASES (CODE 7772)

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<tr>
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<tr>
<td>Written Test</td>
<td>9.7.2019 - 9.00 am at the Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL), Room A, via Pastore 1, Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>9.7.2019 - 12.00 noon at the Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL), Room A, via Pastore 1, Genova.</td>
</tr>
</tbody>
</table>

Further information on how to present qualifications/publications
Please note that by qualifications/publications reference is made to the information in the application and in the curriculum vitae et studiorum, the research project, other qualifications/publications. The latter must not exceed 10 pages each.

Exam Syllabus
The tests will concern topics relating to the research themes.

Research Themes
1. Molecular epidemiology of tumours and other chronic-degenerative diseases.
2. Diet and pharmacological prevention of tumours.
4. Smoking related molecular alterations and tumours and their prevention.
5. Study of the factors of genetic predisposition to tumours.

Information on references
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the contact person of the Doctoral Course Prof. Alberto Izzotti at the following address: izzotti@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages
English

Further Information
Contact person in administration:
Mr Giuseppe Zara
giuseppe.zara@unige.it
Course in: MARINE SCIENCES AND TECHNOLOGIES

Curriculum: LOGISTICS AND TRANSPORTATION (CODE 7776)

Coordinator: Ferrari Claudio
Centro del Mare

<table>
<thead>
<tr>
<th>Places: 6 – Grants: 6 (*) (**)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(*) of which 3 grants funded by Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28.</td>
</tr>
<tr>
<td>(<strong>) 1 funded by Compagnia di San Paolo, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28. (</strong>)</td>
</tr>
<tr>
<td>(<strong>) 1 funded by CIELI and PSA Voltri-Pra, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28. (</strong>)</td>
</tr>
<tr>
<td>(<strong>) 1 funded by CIELI and Grandi Navi Veloci GNV SpA, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28. (</strong>)</td>
</tr>
</tbody>
</table>

Comparative assessment procedure
QUALIFICATIONS/PUBLICATIONS AND INTERVIEW

Interview
3.7.2019 10.00 am, at the CIELI (Centro Italiano di Eccellenza sulla Logistica i Trasporti e le Infrastrutture), second floor, via Vivaldi 5, Genova.

For the candidates who do not live in Genova, the option of a video conferencing interview via Skype is available. The request for this opportunity must be sent, by 15.6.2019, to the following addresses

cieli@unige.it
claudio.ferrari@economia.unige.it

Exam syllabus
The aim of the interview is to assess
- the candidate’s knowledge of the transport sector and its multiple aspects
- the candidate’s aptitude for scientific research
- the candidate’s knowledge of the English language.

Research topics
1. Digitalisation, sharing economy and urban goods distribution
2. methods for the assessment of the performance of a logistic corridor and for the identification of innovative technology to support the corridor management
3. Innovative solutions for the railway-road inter-modal transport based on the idea of Mobility as-a-Service
4. Quantitative methods for the planning of new cruise itineraries
5. Changing trends and international exchanges in Italy based on the use of containers
6. Planning of a sustainable urban mobility: objectives, tools, guidelines and applications
7. Methods for a better planning of logistic systems with particular reference to multi-objective problems
8. Dynamic models and schemes for the control of highway traffic with self driving cars
9. Projects of multi-modal networks for the transport of people and goods
10. Full use of infrastructures and transport services
11. Using ITS (Intelligent Systems of Transport) for a better management of transports
12. Adoption and dissemination of I4.0 enabling technologies in the context of Italian port communities
13. Digitalization of the relationships with users and of the customer’s satisfaction (local (not only) public transports,
14. Logistics and the cruise industry

Information on references
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following address:
claudio.ferrari@economia.unige.it

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

All the reference letters must be written following specific instructions or they will not be taken into consideration.

Foreign Languages
English

(**) 1 grant added on 31.05.2019 following the resolution of Compagnia di San Paolo 2019.0408 dated 28.05.2019
(***) 1 grant added on 11.06.2019 following the Decree of the CIELI Director of 10.06.2019 and letter of intent of PSA Voltri-Pra of 06.06.2019
(****) 1 grant added on 11.06.2019 following the Decree of the CIELI Director of 11.06.2019 and letter of intent of GNV SpA del 11.06.2019
Course in: MARINE SCIENCES AND TECHNOLOGIES

Curriculum: MARINE ECOSYSTEM SCIENCES (CODE 7778)

<table>
<thead>
<tr>
<th>Coordinator: Ferrari Claudio</th>
<th>Centro del Mare</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Places</strong> 7 (<em>) – <strong>Grants:</strong> 5 (</em>).</td>
<td></td>
</tr>
<tr>
<td>(*) 1 funded by Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.</td>
<td></td>
</tr>
<tr>
<td>(*) 3 financed with DISTAV funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.</td>
<td></td>
</tr>
<tr>
<td>(*) 1 funded by Compagnia di San Paolo, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.</td>
<td></td>
</tr>
</tbody>
</table>

(*) 1 place without grant reserved for graduates from foreign Universities (°°)

<table>
<thead>
<tr>
<th>Comparative Assessment procedures</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
<td></td>
</tr>
<tr>
<td>11.7.2019 – at 10:00 a.m. – Dipartimento di Scienze della Terra dell’Ambiente e della Vita (DISTAV), Palazzo delle Scienze, Prof. Vezzulli office, 4th floor, Corso Europa 26, Genova.</td>
<td></td>
</tr>
<tr>
<td>The option of a video conferencing interview via SKYPE is available; candidates intending to participate in a video conferencing interview must request this option at least a week before the scheduled date. The request must be sent to Prof. Luigi Vezzulli via email (<a href="mailto:luigi.vezzulli@unige.it">luigi.vezzulli@unige.it</a>) (°°)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exam syllabus</th>
<th>The interview will focus on the discussion of both the candidate’s curriculum and the research project with special reference to the proposed activities and their relevance to the Doctoral themes, their scientific content and their feasibility.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research topics</td>
<td>Basic aspects - and their applications – concerning the study and conservation of marine biodiversity, the protection and enhancement of coastal and oceanic ecosystems; the management and reduction of coastal risk and environmental monitoring, the development of marine biotechnologies and their applications, the analysis and the risk controls of marine ecosystems- their health (also their relationship with human health) and the sustainable exploitation of the resources and of the marine ecosystemic services.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information on references</th>
<th>Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following address: <a href="mailto:luigi.vezzulli@unige.it">luigi.vezzulli@unige.it</a>. The name, status and service place of the referees chosen by the candidates must be stated in their applications.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Foreign Languages</th>
<th>English</th>
</tr>
</thead>
</table>

(°°) Information updated on 16.05.2019 on request of the Curriculum referee
**Course in: MARINE SCIENCES AND TECHNOLOGIES**

**Curriculum: NAVAL ARCHITECTURE AND MARINE ENGINEERING - MARINE TECHNOLOGIES (CODE 7775)**

<table>
<thead>
<tr>
<th>Coordinator: Ferrari Claudio</th>
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<tbody>
<tr>
<td>Centro del Mare</td>
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<table>
<thead>
<tr>
<th>Places: 5 (<em>) – Grants: 3 (</em>).</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(*) 2 grants funded by Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.</td>
<td></td>
</tr>
<tr>
<td>(*) 1 grant funded by Compagnia di San Paolo, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.</td>
<td></td>
</tr>
<tr>
<td>(*) 1 grant reserved for an Officer of the Genio Navale (Civil Engineer Corps of the Italian Navy)</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Comparative assessment procedures</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
</table>

**Interview**

5.7.2019 – at 9:00 presso il Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni (DITEN), Polo Navale, via Montallegro 1, Genova.

The option of a video conferencing interview via SKYPE is available; candidates intending to participate in a video conferencing interview must request this option at least a week before the scheduled date. The request must be sent to Prof. Cesare M. Rizzo via email (cesare.rizzo@unige.it)

<table>
<thead>
<tr>
<th>Further information on how to present qualifications/publications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidates must: 1) present a research project (max. 10 pages/A4; 2) a curriculum vitae et studiorum (updated)</td>
<td></td>
</tr>
<tr>
<td>Graduating Italian students must provide the list of the exams sat during their Master’s degree.</td>
<td></td>
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</tbody>
</table>

**Exam syllabus**

The interview will deal with the candidate’s research project and with other topics linked with it.

<table>
<thead>
<tr>
<th>Research Themes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The research themes concern the idea, the project, the building and the management of different vessels, fixed, surface/underwater vessels, conventional and unconventional, with particular reference to the processes necessary for the synthesis and integration of many different aspects. All this needs an interdisciplinary approach.</td>
<td></td>
</tr>
</tbody>
</table>
| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following address: cesare.rizzo@unige.it  

The name, status and service place of the referees chosen by the candidates must be stated in their applications. |
| Languages | English |
## Course in: MARINE SCIENCES AND TECHNOLOGIES

### Curriculum: ENGINEERING FOR MARINE AND COASTAL ENVIRONMENTS (CODE 7774)

**Coordinator:** Ferrari Claudio  
Centro del Mare- Sea centre  
**Posti:** 2  
**Borse:** 2 (*)

(*) 2 grants funded by Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.

<table>
<thead>
<tr>
<th>Comparative assessment procedures</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
<td>10.7.2019 – ore 9:00 presso il Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Villa Cambiaso, Room A12, Viale Cambiaso 6, Genova.</td>
</tr>
</tbody>
</table>

Should there be a large number of candidates, the interviews will continue on the following day, July, 15 at 15.00.

The option of a video conferencing interview via Skype is available. Candidates intending to participate in a video conferencing interview must contact the Secretary of the Doctorate (dottorato.dicca@unige.it) and Prof. Giovanni Besio (giovanni.besio@unige.it). Candidates must make sure that their Internet connection works properly.

| Further information on how to present qualifications/publications | Attached to the curriculum vitae there must be a document showing courses, examinations passed and their grades (the whole school/university career). Graduating students are invited to exhibit any documents/qualifications considered useful to support their candidature. |

| Exam syllabus | The interview will focus on a detailed discussion of the candidate’s curriculum, his/her research project and the qualifications. Moreover, the interview aims at testing the candidate’s knowledge of the areas involved in the chosen curriculum. |

| Research themes | - Ocean and Atmosphere Dynamics  
                    - Wave Dynamics  
                    - Mixing Processes in the Sea  
                    - Climate Change related to Ocean Characteristics  
                    - Marine Litter and Microplastic Fate in the Sea  
                    - Bio-chemical Resources of the Sea  
                    - Environmental Reliability, Safety and Risk Management  
                    - Emission Treatment Technologies for Environmental Protection in Marine and Coastal Areas  
                    - Coastal and Harbour Engineering  
                    - Nearshore Hydro- and Morpho-Dynamics  
                    - Fundamentals of Sediment Transport  
                    - Marine Composites and Advanced Materials  
                    - Structural Mechanics in Marine Environments |

| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. One of the referees should be the professor, belonging to the curriculum board, who has helped the candidate with the project choice (http://dottorato.dicca.unige.it/ita/index.html). These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the following address: dottorato.dicca@unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications. All the reference letters must be written following specific instructions or they will not be taken into consideration. |

| Foreign languages | English |
| **Further information** | Prof. Giovanni Besio  
giovanni.besio@unige.it  
http://dottorato.dicca.unige.it/eng/index.html  
dottorato.dicca@unige.it |
Course in: MARINE SCIENCES AND TECHNOLOGIES

Curriculum: FLUID MACHINES AND ENERGY SYSTEMS FOR MARITIME APPLICATIONS (CODE 7777)

<table>
<thead>
<tr>
<th>Coordinator: Ferrari Claudio</th>
<th>Centro del Mare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Places: 3 – Grants: 2 (*)</td>
<td></td>
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<tr>
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</tr>
<tr>
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<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research themes</td>
<td>Machines and energy systems for marine propellers and for the production and conversion of electricity on board and at the dock; systems with a low environmental impact and using clean fuels, renewable energy given by the sea.</td>
</tr>
</tbody>
</table>

| Information on the references   | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Doctorate Coordinator, to Prof. Aristide Massardo, to the following address: massardo@unige.it The name, status and service place of the referees chosen by the candidates must be stated in their applications. |
| Foreign languages               | English                    |

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Course in: MARINE SCIENCES AND TECHNOLOGIES

Curriculum: NAVAL AND NAUTICAL DESIGN (CODE 7773)

<table>
<thead>
<tr>
<th>Coordinator: Ferrari Claudio</th>
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<tr>
<td>Centro del Mare</td>
</tr>
<tr>
<td><strong>Places: 4 (<em>) – Grants: 2 (</em>)</strong></td>
</tr>
</tbody>
</table>

(*) 2 grants funded by Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

(*) 1 grant reserved for the employees of San Lorenzo Spa.

<table>
<thead>
<tr>
<th>Comparative assessment procedures</th>
<th>QUALIFICATIONS AND INTERVIEW</th>
</tr>
</thead>
</table>

| Interview | 12.7.2019 – ore 10:30 presso il Dipartimento di Architettura e Design (DAD), sala riunioni blu Blue meeting room (vicino alla Direzione), Stradone di Sant’Agostino, 37, Genova. |

<table>
<thead>
<tr>
<th>Research themes</th>
<th>Product industrialisation and use of additive manufacturing in the nautical sector Upgrading of the existing nautical context (heritage)</th>
</tr>
</thead>
</table>

| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. One of the referees should be the professor, belonging to the curriculum board, who has helped the candidate with the project choice (http://dottorato.dicca.unige.it/ita/index.html). The referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to Prof. Ivan Zignego to the following address: zignego@arch.unige.it The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

<table>
<thead>
<tr>
<th>Foreign languages</th>
<th>English</th>
</tr>
</thead>
</table>
Course in: SCIENCE AND TECHNOLOGY OF CHEMISTRY AND MATERIALS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia - IIT)

Curriculum: DRUG DISCOVERY AND NANOBIOTECHNOLOGIES (CODE 7779)

Coordinator: Riva Renata

Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI)

Places: 2. Grants: 2 (*)

(*) 2 grants funded by the Istituto Italiano di Tecnologia - IIT (Foundation of the Italian Institute of Technology), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00.

Comparative assessment procedure

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS</th>
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</thead>
<tbody>
<tr>
<td>Assessable qualifications/publications:</td>
</tr>
<tr>
<td>1. academic qualifications and relative marks;</td>
</tr>
<tr>
<td>2. list of exams sat during university studies with relative marks;</td>
</tr>
<tr>
<td>3. reference letters (not more than three);</td>
</tr>
<tr>
<td>4. plan of a research project written in English;</td>
</tr>
<tr>
<td>5. CV;</td>
</tr>
<tr>
<td>6. other optional qualifications/publications (masters, post-university qualification courses, publications in scientific journals, presentations in conferences, patents, study or research awards).</td>
</tr>
</tbody>
</table>

All candidates must attach the certificates relative to all their study qualifications at university level, with the corresponding marks, specifying the duration of the study cycles, to their application.

Foreign candidates must also clearly state the number of years which correspond to each study cycle carried out previous to University enrolment.

If admitted to the doctoral course, the candidate will carry out his/her activity within the syllabus chosen for his/her project, but not necessarily on specific activities described in the actual project.

Research Themes

1. Exploring nano-bio interactions for the development of new drug delivery systems.
2. Development of colorimetric nanosensors for POC and on-field diagnostics.
3. Design and synthesis of modulators of protein function.

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, only by email, to the following address: phd_d3@iit.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Further Information

Dott. Tiziano Bandiera
tiziano.bandiera@iit.it

Dott. Pier Paolo Pompa
pierpaolo.pompa@iit.it

Contact person in administration
Dott.ssa Francesca Razzetti
(+39) 0102896772
francesca.razzetti@iit.it
Course in: SCIENCE AND TECHNOLOGY OF CHEMISTRY AND MATERIALS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia - IIT)

Curriculum: NANO CHEMISTRY (CODE 7780)

Coordinator: Riva Renata
Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI)

Places: 8 (*)– Grants: 6 (*).

(*) 6 grants funded by the Istituto Italiano di Tecnologia - IIT (Foundation of the Italian Institute of Technology), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00.

(°) 1 place with no grant but under a contract financed by the project ETN ULTIMATE

Comparative assessment procedure | QUALIFICATIONS/PUBLICATIONS
--- | ---
Further information on how to present qualifications/publications | Assessable qualifications/publications:
1. academic qualifications and relative marks;
2. list of exams sat during university studies with relative marks;
3. reference letters (not more than three);
4. plan of a research project written in English;
5. CV;
6. other optional qualifications/publications (masters, post-university qualification courses, publications in scientific journals, presentations in conferences, patents, study or research awards).

All candidates must attach the certificates relative to all their study qualifications at university level, with the corresponding marks, specifying the duration of the study cycles, to their application.

Foreign candidates must also clearly state the number of years which correspond to each study cycle carried out previous to University enrolment.

If admitted to the doctoral course, the candidate will carry out his/her activity within the syllabus chosen for his/her project, but not necessarily on specific activities described in the actual project.

Research Themes
1. Development of new materials for energy related applications.
2. Colloidal nanocrystals by design.
3. Top-down approach for Lithium/Sodium-ion batteries.
4. Evaluating multimodal therapeutic effects exploiting inorganic nanoparticles on cancer stem cells.
5. Heterostructures based on upconverting nanoparticles for multiple purposes.
7. Development of 2D materials for water splitting (specifica per il progetto ETN Ultimate).

Information on references
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, only by email, to the following address: phd_nach@iit.it.
The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Further Information
Contact person in administration
Dott. Iulia Manolache
Tel: (+39) 01071781718
julia.manolache@iit.it
Course in: SCIENCE AND TECHNOLOGY OF CHEMISTRY AND MATERIALS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia - IIT)

Curriculum: SCIENCE AND TECHNOLOGY OF MATERIALS (CODE 7781)

| Coordinator: Riva Renata |
| Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI) |
| Places: 4 (*) – Grants: 2 (*). |

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

(°) of which 1 reserved to scholarship holders of foreign Countries.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>11.7.2019 – 9 am at the Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI), via Dodecaneso 31, Genova. The video conference modality (via Skype) is available but the motivated request for video-conference must be sent within and not beyond 28.6.2019 by email to the address: <a href="mailto:annalisa.relini@unige.it">annalisa.relini@unige.it</a>. In case of video conference modality, the candidate must show the identification document attached to the Doctorate admission request.</td>
</tr>
</tbody>
</table>

| Further information on how to present qualifications/publications | Assessable qualifications/publications: 1. academic qualifications and relative marks; 2. list of exams sat during university studies with relative marks; 3. reference letters (not more than three); 4. plan of a research project written in English; 5. CV; 6. other optional qualifications/publications (masters, post-university qualification courses, publications in scientific journals, presentations in conferences, patents, study or research awards). All candidates must attach the certificates relative to all their study qualifications at university level, with the corresponding marks, specifying the duration of the study cycles, to their application. Graduating students, admitted sub condicione, are required to present the certificate stating the exams sat and the corresponding marks. Foreign candidates must also clearly state the number of years which correspond to each study cycle carried out previous to University enrolment. If admitted to the doctoral course, the candidate will carry out his/her activity within the syllabus chosen for his/her project, but not necessarily on specific activities described in the actual project. |

| Exam Syllabus | During the interview candidates will be requested to illustrate the research project plan they presented. The Examining Commission will examine content originality, feasibility and execution modalities of the Project, as well as its relevance to the research themes of this public exam, in order to evaluate the candidate’s ability to develop a scientific project. Knowledge of English will also be verified during the interview. |

<p>| Research Themes | Experimental investigation and analysis of the modelling of metallic, ceramic, polymeric, composite, biomolecular and biocompatible materials. Correlations between methods of production (synthesis, film deposition, crystal growth), structural, morphological, and chemical-physical characteristics and functional properties will be studied. As far as functional aspects are concerned, materials for photonics and plasmons, critically high temperature superconductors, materials for the production and storage of hydrogen, heterogeneous catalyst materials, electronic and magnetic devices, protective coatings, biomaterials will be studied. Characterization will concern structural, electronic and morphologic properties even in the form of films and multilayers, thin and ultrathin, with regard to growth mechanisms and nanostructuring. Crystal-chemical, electrochemical, thermal, magnetic and transport properties, and the microscopic study of tribological processes will also be taken into consideration. The technological aspects of new industrial, environmental and metallurgical catalytic processes will be studied and developed. All the above-mentioned themes will be developed both in the field of basic research and that of applied research (industrial processes, sensors, devices, conservation of the cultural heritage etc.). |</p>
<table>
<thead>
<tr>
<th><strong>Information on references</strong></th>
<th>Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, only by email, to the following address: <a href="mailto:annalisa.relini@unige.it">annalisa.relini@unige.it</a>. The name, status and service place of the referees chosen by the candidates must be stated in their applications.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foreign Languages</strong></td>
<td>English</td>
</tr>
</tbody>
</table>
| **Further Information**     | Prof.ssa Annalisa Relini  
(+39) 0103536427  
analisa.relini@unige.it  

Contact person in administration  
Mrs Noemi Pretelli  
(+39) 0103536161/8752  
noomi@chimica.unige.it |
Course in: SCIENCE AND TECHNOLOGY OF CHEMISTRY AND MATERIALS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia - IIT)

Curriculum: CHEMICAL SCIENCES AND TECHNOLOGIES (CODE 7782)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Riva Renata</th>
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</thead>
<tbody>
<tr>
<td>Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI)</td>
<td></td>
</tr>
<tr>
<td>Places: 6 (<em>) – Grants: 5 (</em>)</td>
<td></td>
</tr>
<tr>
<td>(*) 5 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28 (**)</td>
<td></td>
</tr>
<tr>
<td>(<strong>) 1 grant co-funded by MIUR/DCCI, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28. (</strong>)</td>
<td></td>
</tr>
<tr>
<td>Comparative assessment procedure</td>
<td>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</td>
</tr>
<tr>
<td>Interview</td>
<td>11.7.2019 – 9.00 am at the Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI), via Dodecaneso 31, Genova. The motivated request for video-conference modality must be sent within and not beyond 28/6/2019 by email to the address <a href="mailto:renata.riva@unige.it">renata.riva@unige.it</a>. In case of video conference modality the candidate must show the identification document previously attached to the Doctorate admission request.</td>
</tr>
<tr>
<td>Further information on how to present qualifications/publications</td>
<td>Assessable qualifications/publications: 1. academic qualifications and relative marks; 2. list of exams sat during university studies with relative marks; 3. reference letters (not more than three); 4. plan of a research project written in English; 5. CV; 6. other optional qualifications/publications (masters, post-university qualification courses, publications in scientific journals, presentations in conferences, patents, study or research awards). All candidates must attach the certificates relative to all their study qualifications at university level, with the corresponding marks, specifying the duration of the study cycles, to their application. Graduating students, admitted sub condicione, are required to present the certificate stating the exams sat and the corresponding marks. Foreign candidates must also clearly state the number of years which correspond to each study cycle carried out previous to University enrolment. If admitted to the doctoral course, the candidate will carry out his/her activity within the syllabus chosen for his/her project, but not necessarily on specific activities described in the actual project.</td>
</tr>
<tr>
<td>Exam Syllabus</td>
<td>During the interview candidates will be requested to illustrate the research project plan they presented. The Examining Commission will examine content originality, feasibility and execution modalities of the Project, as well as its relevance to the research themes of this public exam, in order to evaluate the candidate’s ability to develop a scientific project. Knowledge of English will also be verified during the interview.</td>
</tr>
<tr>
<td>Research Themes</td>
<td>- Chemistry and Physical Chemistry of photoactive materials. - Nanoparticles for technological applications. - Synthesis and study of crystal-chemical, thermal, magnetic and transport of oxides, nitrides and carbides properties. - Determination of chemical species of environmental and oceanographic interest. - Development of chromatographic innovative methodologies coupled with mass spectrometry. - Analytic chemistry of trace elements. - Chemistry of the polar environments. - Chemical, enzymatic and organocatalytic synthesis of biologically active compounds. - Synthesis and reactivity of heterocyclic compounds. - Phase equilibria and thermodynamics of metallic materials: experimental and theoretical aspects. - Intermetallic compounds: synthesis, structure, properties and technological applications. - Advanced metallic materials. - Inorganic materials (metallic and refractory) for renewable energy. - Polymeric materials, hybrid and nanocomposites. - Polymeric nanostructures for photonics.</td>
</tr>
</tbody>
</table>
**Information on references**
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, by only email, to the following address: renata.riva@unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications.

**Foreign Languages**
English

**Further Information**
Prof.ssa Renata Riva  
(+39) 0103536106  
renata.riva@unige.it

Contact person in administration  
Mrs Noemi Pretelli  
(+39) 0103536161/8752  
noemi@chimica.unige.it

(*) Information updated on 16.05.2019
Course in: SCIENCE AND TECHNOLOGY OF CHEMISTRY AND MATERIALS  
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia - IIT)  

Curriculum: PHARMACEUTICAL, NUTRITIONAL AND COSMETIC SCIENCES (CODE 7783)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Riva Renata</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Places:</th>
<th>5 – Grants: 4 (*)</th>
</tr>
</thead>
</table>

(*) 4 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.*

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
<td>10.7.2019 - 9.30 am at the Department of Pharmacy (Dipartimento di Farmacia – DIFAR, former venue of DISCIFAR), viale Benedetto XV 3, 16132 Genova. The option of a video conferencing interview via Skype is available. The motivated request for video-conference modality must be sent within and not beyond 25.6.2019 by email to the following address <a href="mailto:bisio@difar.unige.it">bisio@difar.unige.it</a>. In case of video conference modality the candidate must show the identification document previously attached to the Doctorate admission request.</td>
</tr>
</tbody>
</table>

| Further information on how to present qualifications/publications | Assessable qualifications/publications:  
1. academic qualifications and relative marks;  
2. list of exams sat during university studies with relative marks;  
3. reference letters (not more than three);  
4. plan of a research project written in English;  
5. CV;  
6. other optional qualifications/publications (masters, post-university qualification courses, publications in scientific journals, presentations in conferences, patents, study or research awards). |

All candidates must attach the certificates relative to all their study qualifications at university level, with the corresponding marks, specifying the duration of the study cycles, to their application.

Graduating students, admitted sub condicione, are required to present the certificate stating the exams sat and the corresponding marks.

Foreign candidates must also clearly state the number of years which correspond to each study cycle carried out previous to University enrolment.

If admitted to the doctoral course, the candidate will carry out his/her activity within the syllabus chosen for his/her project, but not necessarily on specific activities described in the actual project.

| Exam Syllabus | During the interview candidates will be asked to illustrate the research project plan they presented. The Examining Commission will examine content originality, feasibility and execution modalities of the Project, as well as its relevance to the research themes of this public exam, in order to evaluate the candidate’s ability to develop a scientific project. The candidates’ Knowledge of English will also be tested during the interview. |

| Research Themes | 1. Study of natural active substances and their structural modifications.  
2. Rational design and synthesis of compounds of pharmaceutical interest (e.g. antiviral, antitumor, antimicrobial agents; compounds active on both the cardio-vascular and the central nervous system; correctors and potentiators used to treat cystic fibrosis).  
3. Applications of advanced computational methodologies aimed at studying the ligand-protein interaction.  
4. Study of modern low environmental impact procedures to obtain bioactive compounds interesting for food production. Enhancement and characterisation of food products, development of food supplements and innovative functional foods.  
5. Design and synthesis of biodegradable hydrophilic and amphiphilic Polyester Dendrimers functional to solubilisation in biocompatible solvents of natural insoluble or synthetic therapeutics and applications in drug delivery and in nanomedicine.  
6. Design and development of nanodispersed systems, microdispersed systems or bioadhesive matrix systems, for drug delivery and drug targeting.  
7. Spectroscopic methods and hyperspectral imaging for food and environment applications. Development and applications of chemometric methods of multivariated analysis. Experimental design. |
8. Research of biologically active phytoconstituents.
9. Heavy metal effects on human health (environment, food, medicines).
10. Application of microwaves (organic and inorganic synthesis) and methods of reaction without solvent. - Green Chemistry procedure.
11. Study and applications of modern micro-wave assisted extraction techniques on the basis of Green Extraction (SFME, HGD, MAE), to obtain bioactive compounds relevant to the cosmetic and pharmaceutical sectors, with special reference to the use of botanical matrices or food industry waste derived matrices.

<table>
<thead>
<tr>
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<th>Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, by only email, to the following address: <a href="mailto:bisio@difar.unige.it">bisio@difar.unige.it</a>. The name, status and service place of the referees chosen by the candidates must be stated in their applications.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Languages</td>
<td>English</td>
</tr>
</tbody>
</table>
| Further Information       | Prof. Angela Bisio
(+39) 0103352637
bisio@difar.unige.it
Contact person in administration
Mrs Noemi Pretelli
(+39) 0103536161/8752
noemi@chimica.unige.it |
Course in: SCIENCE AND TECHNOLOGY FOR THE ENVIRONMENT AND TERRITORY (STET)

Curriculum: BIOLOGY APPLIED TO AGRICULTURE AND THE ENVIRONMENT (CODE 7784)

<table>
<thead>
<tr>
<th>Coordinator: Scambelluri Marco</th>
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</thead>
<tbody>
<tr>
<td>Department of Earth, Environmental and Life Sciences (Dipartimento di Scienze della Terra, dell’Ambiente e della Vita – DISTA V)</td>
</tr>
<tr>
<td>Places: 2 – Grants: 2 (*)</td>
</tr>
</tbody>
</table>

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>9.7.2019, 9.30 am at the Department of Earth, Environmental and Life Sciences (Dipartimento di Scienze della terra, dell’ambiente e della vita – DISTA V), Room Perrier, corso Europa 26, Genova. The interviews may continue on 10.7.2019. Upon explicit request and before the deadline for the application, the interview may also take place electronically (video conference via Skype) by contacting the person in charge of this curriculum: Prof. Mauro Mariotti (+39) 0103538139 <a href="mailto:m.mariotti@unige.it">m.mariotti@unige.it</a></td>
</tr>
</tbody>
</table>

Exam Syllabus

The interview will focus on:
1) the general knowledge of the topic pertinent to the research theme chosen by the candidate among the ones listed in the Call
2) all the activities performed by the the candidate during his/her studies and training, including other experiences showing the candidate’s mastery of work tools and experimental methodologies
3) a critical analysis of the project

Research Themes

1) Niche-based models for an integrated Systematics and possible applications for the conservation of Italian endemic plant species.
2) Macromclimate, microclimate and functional traits in the world of lichens: their importance as a tool for studying the effects of global changes.
3) Decline in amphibian population: immunity and fungal infections
4) In vitro tests for asbestos toxicity
5) Biological activity of natural compounds on cellular models of metabolic alterations
6) Functional characterisation of plant cytochrome b561: from redox reactions to blossoming processes
7) Chronobiology of new Arthropods species a andimed to the evaluation of their impact on the environment and to the definition of control strategies
8) Filamentous fungi from different extreme contexts: biodiversity, ecology, iterations, possible uses.

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters in pdf format, within the deadline of the application for the public notice, to the person in charge of the curriculum Prof. Mauro Mariotti, m.mariotti@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Letters which have not been sent directly by the referees will not be taken into consideration.

**Foreign Languages**

English or French or Spanish.
Course in: SCIENCE AND TECHNOLOGY FOR THE ENVIRONMENT AND TERRITORY (STET)

Curriculum: EARTH SCIENCES (CODE 7785)

Coordinator: Scambelluri Marco

Department of Earth, Environmental and Life Sciences (Dipartimento di Scienze della Terra, dell’Ambiente e della Vita – DISTA V)

Places: 3 – Grants: 2 (*).

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343,28.

Comparative assessment procedure

<table>
<thead>
<tr>
<th>Interview</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.7.2019, 9.30 am at the Department of Earth, Environmental and Life Sciences (Dipartimento di Scienze della terra, dell'ambiente e della vita – DISTAV), Room Perrier, corso Europa 26, Genova. The interviews may continue on 10.7.2019. Upon request, the interview may also take place electronically (video conference via SKYPE) by contacting the person in charge of this curriculum in time: Prof. Marco Scambelluri Dipartimento di Scienze della Terra dell'Ambiente e della Vita (DISTA V) (+39) 0103538307 <a href="mailto:marco.scambelluri@dipteris.unige.it">marco.scambelluri@dipteris.unige.it</a></td>
<td></td>
</tr>
</tbody>
</table>

Further information on how to present qualifications/publications

Please note that the choice of the theme of the research project will not change the graduate student’s legal status concerning the object of the research activity that will be carried out during the doctoral course, according to the Teaching Body’s indications. By qualifications/publications reference is made to the information in the application and in the attached documents. The following documents must be attached to the application:

a) a curriculum vitae et studiorum (not more than 10 pages long);

b) a research project plan concerning one or more of the themes of the doctoral course the application is for (not more than 10 pages long);

c) a document containing the title of the thesis and a brief description of it, as well as a list of exams sat with the relative marks;

d) any other qualifications/publications relevant to the research thematic of the course (not more than 10 pages long);

e) a minimum of one to a maximum of three reference letters.

As per this Call, candidates’ admission request as well as their documents can be written in Italian and in English.

Exam Syllabus

The interview will focus on:

1. testing the candidate’s general knowledge of the world of geology (processes, themes, etc) and his/her real interest in the research offered by the Doctorate;

2. a conversation on the candidate’s studies to know his/her mastery of the fundamentals (including tools, experimental methodologies) related to the project he/she has presented;

3. a discussion on the specific research theme the candidate intends to develop during his/her Doctorate;

4. The interview will be a way, for the candidate, to show his/her communication skills and his/her knowledge and mastery of the proper scientific language.

Research Themes

The curriculum research themes aim at describing and interpreting endogenous and exogenous processes of the Earth System by integrating the ample spectrum of geosciences (disciplines belonging to geological, geomorphological, mineral, crystallographic, geochemical, structural, petrological, stratigraphic mining geology, paleontological and geophysical contexts).

The main objective of the Doctorate in Scienze della Terra is to create professionals and young researchers able to use and manage advanced scientific competences, and analytical, innovative technologies (Frontier Technologies) for the description and the modelling of the processes regulating:

- both the endogenous and exogenous Earth Dynamics
- lithosphere-biosphere interactions
- lithosphere-hydrosphere interactions

More specifically the research themes are:

1. Study and modelling of:
- the Earth Dynamics,
- the oceans and their genesis
- mountain formation (orogenesis)
- landform evolutions
- environmental reconstruction using fossil records

2. Study of
   - the processes causing landform evolutions;
   - the evaluation and mitigation of geological/environmental hazards
   - land-use planning and protection

3. Finding natural resources: water, energy, mineral and lithoid resources; management and enhancement of their residues;

4. Evaluation and mitigation of geological and geoenvironmental risks deriving from natural and anthropic catastrophic events

5. Conservation of the nature/landscape, archaeo/environmental heritage and of the cultural heritage;

6. Determining and predicting the behaviour of geomaterials under different temperatures and pressures seen as a contribution to the solution of scientific and application problems;

7. Interdisciplinary study of the interaction between mineral phases and biosphere and of the consequent release, transport and seizure of organic and inorganic species processes.

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters in pdf format, within the deadline of the application for the public notice, to the person in charge of the curriculum: marco.scambelluri@dipteris.unige.it

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Letters which have not been sent directly by the referees will not be taken into consideration.

**Foreign Languages**

English
Course in: SCIENCE AND TECHNOLOGY FOR ELECTRICAL ENGINEERING, COMPLEX SYSTEMS FOR MOBILITY

Curriculum: ELECTRICAL ENGINEERING (CODE 7786)

Coordinator: Marchesoni Mario
Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN)

Places: 6 – Grants: 5 (*) (°°)

(*) 3 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28.

(*) 1 grant is co-financed by MIUR/DITEN funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28.

(*) 1 grant is financed by DITEN funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28. (°°)

Comparative assessment procedure

QUALIFICATIONS/PUBLICATIONS

Further information on how to present qualifications/publications

Candidates must present:
1) a research project 10 pages long maximum;
2) an updated CV;
3) a brief abstract of the specialist degree thesis.
Italian students who have not yet got their degree must present a list of exams they did for their 5-year degree course with the marks.

Research Themes


(F) Environment: Numeric simulation and measuring and field reduction techniques. Optimized design of low emission devices. Low environmental impact systems.

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: mario.marchesoni@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

English

Further Information

Prof. Mario Marchesoni
Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni (DITEN) via all’Opera Pia 11a, 16145 Genova
mario.marchesoni@unige.it
(+39) 0103532183

Laura Brunelli
brunelli@dinav.unige.it
(+39) 0103532286

(°°) 1 grant added, following the decree of DITEN Director 2264/2019
Course in: SCIENCE AND TECHNOLOGY FOR ELECTRONIC AND TELECOMMUNICATION ENGINEERING  
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia - ITT)

Curriculum: INTERACTIVE COGNITIVE ENVIRONMENTS (CODE 7788)

Coordinator: Marchese Mario
Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN)

Places: 2 – Grants: 1 (*)

(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16,500.00.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
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</thead>
<tbody>
<tr>
<td>Interview</td>
<td>15.7.2019 – 3.00 pm at the Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN), via Opera Pia 11A, Genova. The interviews may also take place electronically with a Skype connection, video included to check identity, on request to the Coordinator of the Doctoral Course, Prof. Mario Marchese, by email to <a href="mailto:mario.marchese@unige.it">mario.marchese@unige.it</a> adding one's Skype account in the request.</td>
</tr>
</tbody>
</table>

Further information on how to present qualifications/publications

In presenting their CV, it is important for candidates to highlight the following features as they will be used as evaluative parameters: publications done (e.g. in International Journals, International Conferences, Book Chapters), the degree mark (or equivalent qualification) obtained, work experience and acquired skills.

It is also important for candidates to highlight the following features when presenting their research project as they will be used as evaluative parameters: Relevance to the research themes that appear in this public exam, Originality, Execution modalities, Feasibility, Clear presentation/exposition.

A possible outline for the presentation of the research project plan, which should not exceed 10 pages, is the following:
- motivations and logic foundation;
- state of the art;
- objectives;
- methods employed;
- preliminary workplan;
- expected outcomes;
- bibliography.

Exam Syllabus

The interview aims at evaluating the candidates’ competences in relation to the research themes listed and methodological abilities to face research problems. Furthermore, the interview will also deal with the thematics of the research project presented by the candidate.

Research Themes

1. Electromagnetic diagnostics for biomedical applications
2. Electromagnetic modeling and simulations of interest for low level laser therapies
3. Satellite Networks in the 5G Ecosystem
4. Network Security over smart cities/smart industries
5. Detection and Localization Techniques for UAV and Drones Monitoring
6. Learning of interaction models from multisensory signals for artificial self aware agents capable of imitative behaviors
7. Multimodal single and collective self awareness agent models for autonomous ground and aerial vehicles
8. Machine learning methods for cognitive AI-enabled radio
9. Electronic skin and haptic feedback for Virtual and Augmented Reality systems
10. Smart embedded sensor data decoding systems for edge computing and IoT.
11. Neuromorphic tactile devices and systems
12. Embedded computing for unmanned systems
13. Intelligent sensor networks and predictive analysis algorithms for optimizing health prevention plans and improving the quality of life at home
14. Probabilistic graphical models and machine learning methods for remote sensing image analysis
15. Machine learning on the edge
16. IoT enabled architectures and services
17. Smart objects in domotics (**) 

More detailed information on the specific themes at: [http://www.phd-stiet.diten.unige.it](http://www.phd-stiet.diten.unige.it)
**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following addresses: mario.marchese@unige.it; The name, status and service place of the referees chosen by the candidates must be stated in their applications. The candidates’ aptitude for scientific research must emerge from the contents of the reference letters.

**Foreign Languages**

- English

**Further Information**

Prof. Mario Marchese  
Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni (DITEN)  
via Opera Pia 13  
16145 Genova  
mario.marchese@unige.it

(*) Information updated on request of the Course Coordinator on 24.05.2019
Course in: SCIENCE AND TECHNOLOGY FOR ELECTRONIC AND TELECOMMUNICATION ENGINEERING
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia - ITT)

Curriculum: ELECTROMAGNETISM, ELECTRONICS, TELECOMMUNICATIONS (CODE 7789)

| **Coordinator:** Marchese Mario |
| Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN) |
| **Places:** 7 – **Grants:** 5 (*) |

(*) 4 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00.

(*) 1 grant funded by RULEX/CNR (Consiglio Nazionale delle Ricerche), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00.

**Comparative assessment procedure**

| QUALIFICATIONS/PUBLICATIONS AND INTERVIEW |
| **Interview** |
| 15.7.2019 – 9:00 am at the Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN), via Opera Pia 11A, Genova. The interviews may also take place electronically with a Skype connection, video included to check identity, on request to the Coordinator of the Doctoral Course, Prof. Mario Marchese, by email to mario.marchese@unige.it adding one’s Skype account in the request. |

Further information on how to present qualifications/publications

In presenting their CV, it is important for candidates to highlight the following features as they will be used as evaluative parameters: publications done (e.g. in International Journals, International Conferences, Book Chapters), the degree mark (or equivalent qualification) obtained, work experience and acquired skills.

It is also important for candidates to highlight the following features when presenting their research project as they will be used as evaluative parameters: Relevance to the research themes that appear in this public exam, Originality, Execution modalities, Feasibility, Clear presentation/exposition.

A possible outline for the presentation of the research project plan, which should not exceed 10 pages, is the following:
- motivations and logic foundation;
- state of the art;
- objectives;
- methods employed;
- preliminary workplan;
- expected outcomes;
- bibliography.

**Exam Syllabus**

The interview aims at evaluating the candidates’ competences in relation to the research themes listed and methodological abilities to face research problems. Furthermore, the interview will also deal with the themes of the research project presented by the candidate.

**Research Themes**

1. Electromagnetic diagnostics for biomedical applications
2. Electromagnetic modeling and simulations of interest for low level laser therapies
3. Satellite Networks in the 5G Ecosystem
4. Network Security over smart cities/smart industries
5. Detection and Localization Techniques for UAV and Drones Monitoring
6. Learning of interaction models from multisensory signals for artificial self aware agents capable of imitative behaviors
7. Multimodal single and collective self awareness agent models for autonomous ground and aerial vehicles
8. Machine learning methods for cognitive AI-enabled radio
9. Electronic skin and haptic feedback for Virtual and Augmented Reality systems
10. Smart embedded sensor data decoding systems for edge computing and IoT.
11. Neuromorphic tactile devices and systems
12. Embedded computing for unmanned systems
13. Intelligent sensor networks and predictive analysis algorithms for optimizing health prevention plans and improving the quality of life at home
14. Probabilistic graphical models and machine learning methods for remote sensing image analysis
15. Machine learning on the edge
16. IoT enabled architectures and services
17. Smart objects in domotics (**)

More detailed information on the specific themes at: [http://www.phd-stiet.diten.unige.it](http://www.phd-stiet.diten.unige.it)
**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following addresses: mario.marchese@unige.it; The name, status and service place of the referees chosen by the candidates must be stated in their applications. The candidates’ aptitude for scientific research must emerge from the contents of the reference letters.

<table>
<thead>
<tr>
<th>Foreign Languages</th>
<th>English</th>
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</table>

**Further Information**

Prof. Mario Marchese
Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni (DITEN) via Opera Pia 13
16145 Genova
mario.marchese@unige.it

(*) Information updated on request of the Course Coordinator on 24.05.2019
Course in: SCIENCE AND TECHNOLOGY FOR ELECTRONIC AND TELECOMMUNICATION ENGINEERING
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia - ITT)

Curriculum: COMPUTATIONAL VISION, AUTOMATIC RECOGNITION AND LEARNING (CODE 7790)

**Coordinator:** Marchese Mario

Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN)

**Places:** 7 – **Grants:** 6 (*).

(*) 6 grants funded by the Istituto Italiano di Tecnologia - IIT (Foundation of the Italian Institute of Technology), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16,500,00

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
<td>10.7.2019 – 9.00 am at the Istituto Italiano di Tecnologia (IIT), Via Enrico Melen, 83, Genova</td>
</tr>
<tr>
<td></td>
<td>The interviews may also take place electronically with a Skype connection, video included to check identity, on request to the Coordinator of the Doctoral Course, Prof. Mario Marchese, by email to <a href="mailto:mario.marchese@unige.it">mario.marchese@unige.it</a> and to Prof. Vittorio Murino, <a href="mailto:vittorio.murino@iit.it">vittorio.murino@iit.it</a>.</td>
</tr>
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**Further information on how to present qualifications/publications**

In presenting their CV, it is important for candidates to highlight the following features as they will be used as evaluative parameters: publications done (e.g. in International Journals, International Conferences, Book Chapters), the degree mark (or equivalent qualification) obtained, work experience and acquired skills.

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A possible outline for the presentation of the research project plan, which should not exceed 10 page, is the following:

- motivations and logic foundation;
- state of the art;
- objectives;
- methods employed;
- preliminary workplan;
- expected outcomes;
- bibliography.

Further details for the preparation of the research project are available in a document at the following address: https://pavisdata.iit.it/data/phd/ResearchProjectTemplate

**Exam Syllabus**

The interview aims at evaluating the candidates’ competences in relation to the research themes listed and methodological abilities to face research problems. Furthermore, the interview will also deal with the themes of the research project plan presented by the candidate.

**Research Themes**

Theme A - Computer vision for the prediction of human intentions, activities and behavior
Theme B - Human body modeling for Socially-Aware Computer Vision
Theme C - 3D scene understanding with geometrical and deep learning reasoning
Theme D - Multi-modal scene understanding
Theme E - Computer vision into the wild
Theme F - Zero- and Few-Shot Learning
Theme G - Crowd behavioral analysis and event recognition
Theme H - Re-identification
Theme I - Biomedical imaging & Neuroimaging
Theme L - Movement and behavior analysis in biomedical applications

Further details on specific themes are available in a document at the following address: https://pavisdata.iit.it/data/phd/ResearchTopicsPhD2019_IIT-PAVIS+VGM.pdf (**)  

**Information on references**

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course Prof. Mario Marchese at the following addresses, mario.marchese@unige.it and to Prof. Vittorio Murino at vittorio.murino@iit.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications. The candidates’ aptitude for scientific research must emerge from the contents of the reference letters.

**Foreign Languages**

English
| **Further Information**          | Prof. Mario Marchese
                                      | Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni (DITEN)
                                      | via Opera Pia 13
                                      | 16145 Genova
                                      | mario.marchese@unige.it
                                      
                                      | Prof. Vittorio Murino, Ph.D.
                                      | Director, PAVIS - Pattern Analysis & Computer Vision
                                      | IIT Istituto Italiano di Tecnologia
                                      | Via Enrico Melen, 83, 16152, Genova, GE
                                      | vittorio.murino@iit.it

(*) Information updated on request of the Course Coordinator on 24.05.2019
Course in: PAEDIATRIC SCIENCES  
In agreement with IRCCS Istituto Giannina Gaslini

Curriculum: ENDOCRINOLOGY AND DIABETOLOGY (CODE 7791)

<table>
<thead>
<tr>
<th>Coordinatore:</th>
<th>Minetti Carlo</th>
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</thead>
<tbody>
<tr>
<td>Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI)</td>
<td></td>
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<tr>
<td>Places:</td>
<td>1 – Grants: 1 (*)</td>
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<tr>
<td>(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28</td>
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<td><strong>Comparative assessment procedure</strong></td>
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<tr>
<th>Research Themes</th>
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<tbody>
<tr>
<td>In depth study of new methods to diagnose and treat endocrine and metabolic pathologies in children and adolescents, with special attention to the diseases of the hypothalamus and hypophysis which concern the network of the complex endocrine metabolic system, to the pathologies of the median line associated to endocrine pathologies and to the various organ diseases, including diabetes mellitus.</td>
</tr>
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**Course in:** PAEDIATRIC SCIENCES  
**In agreement with IRCCS Istituto Giannina Gaslini**

**Curriculum: GENETICS (CODE 7792)**

<table>
<thead>
<tr>
<th>Coordinator: Minetti Carlo</th>
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</thead>
<tbody>
<tr>
<td>Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, ooftalmologia, genetica e scienze materno-infantili – DINOGMI)</td>
</tr>
</tbody>
</table>

**Places:** 1  
**Grants:** 1 (*)

(*) 1 grant financed by DINOGMI funds **within the project “Dipartimenti di Eccellenza”,** the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28 (**°°**)

<table>
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<tr>
<td>- New knowledge concerning the human genome, including investigations with new technologies;</td>
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<tr>
<td>- Identification of disease genes, their mutations, their consequences in the disease mechanism at a molecular and cellular level and correlations with the clinical phenotype;</td>
</tr>
<tr>
<td>- Singling out of specific aspects of the pathogenic mechanisms that can become the targets for therapeutic approaches;</td>
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<tr>
<td>- Gene structure and control of gene expression.</td>
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(**°°**) Information added on request of the Course Coordinator on 31.05.2019
**Course in:** PAEDIATRIC SCIENCES  
In agreement with IRCCS Istituto Giannina Gaslini

**Curriculum:** MUSCULAR, NEURODEGENERATIVE AND METABOLIC DISEASES IN CHILDREN AND ADOLESCENTS (CODE 7793)

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(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

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**Interview**

10.7.2019 – 2.00 pm, at the Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI), Museum Room (Sala Museo), Istituto G. Gaslini, Wing 16 (Padiglione 16), first floor, via G. Gaslini 5, Genova.

**Exam Syllabus**

Contents of the interview:
- previous research experience, including research carried out for the degree dissertation;
- ideas for projects;
- knowledge of basic methodologies for clinical and laboratory research;
- knowledge of English.

Research Themes

In depth study of new methods to prevent, diagnose and treat neuropaediatric pathologies in children and adolescents, with special attention to neuromuscular diseases, neurodegenerative, neuro-metabolic and in general gene-metabolic pathologies, to epilepsies of genetic origin in childhood which may involve neurosurgery, to the defects of the neural tube and of cortical migration and to neurofibromatosis. Molecular and environmental factors of the development of the nervous system will be studied, as well as the etiological and pathogenetic aspects of congenital hypotonia, primitive myopathies, spinal muscular atrophies, mitochondrial encephalopathies, leukoencephalopathies, epileptic encephalopathies and metabolic encephalopathies.

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course Prof. Carlo Minetti minettic@unige.it and copy to: rosanna.rizzo@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

English
Course in: PAEDIATRIC SCIENCES
In agreement with IRCCS Istituto Giannina Gaslini

Curriculum: FOETAL-PERINATAL AND PAEDIATRIC PATHOLOGY (CODE 7794)

Coordinator: Minetti Carlo

Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI)

Places: 1 – Grants: 1

(*) 1 grant funded by Università di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient is € 15,343.28.

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</tr>
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Exam Syllabus

Contents of the interview:
- previous research experience, including research carried out for the degree dissertation;
- ideas for projects;
- knowledge of basic methodologies for clinical and laboratory research;
- knowledge of English.

Research Themes

- isolated malformation pathology or inserted in syndromic pictures;
- patholgy of foetal development and maturation of the foetus and of the consequent adaptive capacities at the moment of birth;
- placental pathology linked to preterm deliveries and to serious premature births;
- foetal, neonatal and paediatric cardiovascular pathology;
- neonatal neurological damage;
- dysplastic and teratomatous pathology;
- neoplastic pathology.

Information on references

Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course Prof. Carlo Minetti minettic@unige.it and copy to: rosanna.rizzo@unige.it.

The name, status and service place of the referees chosen by the candidates must be stated in their applications.

Foreign Languages

English
Course in: PAEDIATRIC SCIENCES  
In agreement with IRCCS Istituto Giannina Gaslini  
Curriculum: PAEDIATRIC RHEUMATOLOGY (CODE 7796)

| **Coordinator:** Minetti Carlo  
Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI)  
**Places:** 1 – **Grants:** 1 (*).  
(*) Grant financed by DINOGMI funds within the project “Dipartimenti di Eccellenza”, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28 (°°)  
**Comparative assessment procedure** QUALIFICATIONS/PUBLICATIONS AND INTERVIEW  
| **Interview**  
10.7.2019 – 2.00 pm, at the Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI), Museum Room (Sala Museo), Istituto G. Gaslini, Wing 16 (Padiglione 16), first floor, via G. Gaslini 5, Genova.  
**Exam Syllabus**  
Contents of the interview:  
- previous research experience, including research carried out for the degree dissertation;  
- ideas for projects;  
- knowledge of basic methodologies for clinical and laboratory research;  
- knowledge of English.  
**Research Themes**  
In depth study of new methods for the diagnosis and treatment of paediatric rheumatic diseases, with special attention concerning Juvenile Idiopathic Arthritis and other diseases of autoimmune origin and autoinflammatory syndromes.  
**Information on references**  
Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course Prof. Carlo Minetti minettic@unige.it and copy to: rosanna.rizzo@unige.it.  
The name, status and service place of the referees chosen by the candidates must be stated in their applications.  
**Foreign Languages** English  
(*) Information added on request of the Course Coordinator on 31.05.2019
Course in: PAEDIATRIC SCIENCES
In agreement with IRCCS Istituto Giannina Gaslini

Curriculum: PAEDIATRIC SPECIALTIES (CODE 7795)

<table>
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<tr>
<td>Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI)</td>
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</table>

| Places: | 7 – Grants: 5 (*) (**), 1 grant co-financed by MIUR/DINOGMI funds, 1 grant funded by ADMO Liguria, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28. |
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<td>- knowledge of English.</td>
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| Research Themes | In depth study of new methods for the diagnosis and treatment of paediatric pathologies of medical or surgical relevance, with special attention concerning the paediatric specialties present in the G. Gaslini Institute. |

| Information on references | Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course Prof. Carlo Minetti minettic@unige.it and copy to: rosanna.rizzo@unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications. |

| Foreign Languages | English |

(*) 3 Grants funded by IRCCS Istituto G. Gaslini, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28. 
(*) 1 grant co-financed by MIUR/DINOGMI funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28. 
(*) 1 grant funded by ADMO Liguria, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28. 

(**) 1 grant added on 31.05.2019, following the agreement signed on 23.05.2019 between DINOGMI and ADMO Liguria.
Course in: SOCIAL SCIENCES

Curriculum: MIGRATIONS AND INTERCULTURAL PROCESSES (CODE 7797)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Andrighetto Luca</th>
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<tbody>
<tr>
<td>Department of Education</td>
<td>Dipartimento di Scienze della Formazione - DISFOR</td>
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<tr>
<td>Places:</td>
<td>3 – Grants: 2 (*)</td>
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<tr>
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<td>Interview</td>
<td>10.7.2019 – 9.00 am at the Department of Education Sciences (Dipartimento di Scienze della Formazione – DISFOR), corso A. Podestà 2, Genova. The option of a video (to verify the candidate’s ID) conferencing interview via Skype is available. The motivated request for video-conference modality must be sent within and not beyond 08.7.2019 – 12-00 noon, by email to the following addresses: prof. Nadia Rania (the person in charge of the curriculum) <a href="mailto:nadia.rania@unige.it">nadia.rania@unige.it</a> and prof. Luca Andrighetto (the Doctorate coordinator) <a href="mailto:luca.andrighetto@unige.it">luca.andrighetto@unige.it</a> . In the email, the candidate’s name, surname and Skype address must be specified.</td>
</tr>
</tbody>
</table>

| Further information on how to present qualifications/publications | The following will be assessed: 1. The quality of the research project presented. 2. Research experience and scientific publications. 3. Thesis of the 5 or 4-year degree course, which has to be attached in PDF format. 4. Academic curriculum and degree mark. 5. Specific experiences relevant to the Doctorate themes |

| Exam Syllabus | For the admission to the interview, a minimum score, decided by the Commission, and resulting from the qualifications and the project evaluation, is required. The interview will focus on the discussion of the research project and of the qualifications presented, with special reference to some aspects of research methodologies and data analysis techniques within the specific subject areas. During the interview, the candidate’s real motivation, together with his/her knowledge of two European languages (Italian, English, French and Spanish) will be assessed. |

| Research Themes | - Integration, acculturation and identity construction processes through different levels of analysis (individual, family, group). - Ingroup-outgroup relationships in various contexts (educational, formative and work-related). - Intercultural processes in the wake of migration movements both for the countries of origin and in those of arrival. - Reception systems; forced migrations, environmental migrations and transformations following migrations in urban and rural contexts from local to global. These research themes can be analyzed using models and methods of various disciplines in the field of social sciences (anthropology, geography, pedagogy, psychology, sociology, history). |

| Information on references | Reference letters are not required. Nonetheless, any reference letters received will not be taken into consideration for the final score. |

| Foreign Languages | English or French or Spanish |

<table>
<thead>
<tr>
<th>Further Information</th>
<th>Prof. Nadia Rania Dipartimento di Scienze della Formazione (DISFOR) corso Podestà 2 Genova (+39) 01020953747 <a href="mailto:nadia.rania@unige.it">nadia.rania@unige.it</a></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Administrative secretariat: Dott.ssa Francesca Figus, Dipartimento di Scienze della Formazione (DISFOR) C.so Podestà 2 +39 010 20953742 <a href="mailto:francesca.figus@unige.it">francesca.figus@unige.it</a></td>
</tr>
</tbody>
</table>
Course in: SOCIAL SCIENCES
Curriculum: PSYCHOLOGY AND COGNITIVE SCIENCES (CODE 7798)

Coordinator: Andrighetto Luca
Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR)

Places: 2 – Grants: 2 (*).

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15.343.28.

Comparative assessment procedure

<table>
<thead>
<tr>
<th>Qualifications/publications and exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Test</td>
</tr>
<tr>
<td>8.7.2019 – 10.00 am at the Department of Education Sciences (Dipartimento di Scienze della Formazione – DISFOR), corso A. Podestà 2, Genova.</td>
</tr>
<tr>
<td>Interview</td>
</tr>
<tr>
<td>10.7.2019 – 12.00 noon at the Department of Education Sciences (Dipartimento di Scienze della Formazione – DISFOR), corso A. Podestà 2, Genova.</td>
</tr>
</tbody>
</table>

Further information on how to present qualifications/publications

The following will be assessed:
1. The quality of the research project presented.
2. Research experience and scientific publications.
3. Thesis of the 5 or 4-year degree course, which has to be attached in PDF format.
4. Academic curriculum and degree mark.

The examining commission reserves the right to fix a minimum score threshold to be obtained by candidates in the evaluation of their qualifications/publications in order to be admitted to the written test.

Exam Syllabus

The written test will consist in the critical discussion of an article presented by the examining commission, related to the themes of the curriculum.

The interview will be a discussion concerning the candidates’ research project and the qualifications/publications presented, as well as their written test, also with reference to the features of the general research methods and data analysis techniques in the disciplinary fields of reference. Furthermore, during the interview, knowledge of English will be tested.

The examining commission reserves the right to fix a minimum score threshold to be obtained by candidates in the written test in order to be admitted to the interview.

Research Themes

- Working memory. Critical thinking skills. Body expressions, gestures and language. Implicit aspects in expressing attitudes and in clinical manifesta


- Mentalisation in clinical groups and not. Risk factors and protection in families and couples.

Information on references

Reference letters are not required. Nonetheless, any reference letters received will not be taken into consideration for the final score.

Foreign Languages

English

Further Information

Prof. Cecilia Pace
Dipartimento di Scienze della Formazione (DISFOR)
C.so Podestà 2
+39 010 20953722
cecilia.pace@unige.it

Dott.ssa Francesca Figus
Dipartimento di Scienze della Formazione (DISFOR)
C.so Podestà 2
+39 010 20953742
francesca.figus@unige.it
## Course in: SOCIAL SCIENCES

## Curriculum: POLITICAL SCIENCES (CODE 7799)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Andrighetto Luca</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR)</td>
<td></td>
</tr>
<tr>
<td><strong>Places:</strong></td>
<td>2 – <strong>Grants:</strong> 2 (*)</td>
</tr>
</tbody>
</table>

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

### Comparative assessment procedure

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<th><strong>Qualifications/Publications and Exams</strong></th>
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<tr>
<td><strong>Written Test</strong></td>
</tr>
<tr>
<td><strong>Interview</strong></td>
</tr>
</tbody>
</table>

### Further information on how to present qualifications/publications

The examining commission reserves the right to fix a minimum score threshold to be obtained by candidates in the evaluation of their qualifications/publications in order to be admitted to the written test.

The following will be evaluated:
1. The quality of the research project presented by the candidate
2. The final graduation thesis which has to be attached in PDF format
3. Academic curriculum and graduation mark.

### Exam Syllabus

The paper (written test) will be on one of the research themes indicated. The interview will be on candidates’ curriculum, their written test, their research project and on the research theme chosen among those featured in the syllabus.

The examining commission reserves the right to fix a minimum score threshold to be obtained by candidates in the written test in order to be admitted to the interview.

During the interview the knowledge of a foreign language will be tested. (English, French and Spanish)

### Research Themes

- Political ideas, ideologies and political phenomena in a historical-critical perspective
- Human Rights promotion and protection in a local, national and international dimension
- Social and political changes in democratic contexts: the transformation dynamics of the political and cultural relations linked to the changes
- Methodology of social research
- Regulation of scientific activity: between law, market and politics and its influence on research practices.
- Global changes, territorial dynamics, conflicts, security and migrations
- Dynamics of international migrations and territorial political perspectives of religious phenomena

### Information on references

Reference letters are not required. Nonetheless, any reference letters received will not be taken into consideration for the final score.

### Foreign Languages

English or French or Spanish

### Further Information

Prof. Paolo Parra Saiani
Dipartimento di Scienze Politiche (DISPO)
piazzale Emanuele Brignole 3a, Genova
(+39) 01020951171
paolo.parra.saiani@unige.it

Dott.ssa Francesca Figus
Dipartimento di Scienze della Formazione (DISFOR)
C.so Podestà 2
+39 010 20953742
francesca.figus@unige.it
Course in: SOCIAL SCIENCES

Curriculum: SOCIOLOGY (CODE 7800)

Coordinator: Andrighetto Luca
Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR)

Places: 3 – Grants: 2 (*).

(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

(*) 1 grant co-financed by MIUR/DISFOR funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

Comparative assessment procedure

QUALIFICATIONS/PUBLICATIONS AND INTERVIEW

Interview

10.7.2019 – 11.00 am at the Department of Education Sciences (Dipartimento di Scienze della Formazione – DISFOR), corso A. Podestà 2, Genova.

The option of a video (to verify the candidate’s ID) conferencing interview via Skype is available. The motivated request for video-conference modality must be sent within and not beyond 08.7.2019 – 11-00 a.m., by email to the following addresses: prof. Luca Guzzetti (the person in charge of the curriculum) luca.guzzetti@unige.it and prof. Luca Andrighetto (the Doctorate coordinator) luca.andrighetto@unige.it. In the email, the candidate’s name, surname and Skype address must be specified.

Further information on how to present qualifications/publications

A minimum score, decided by the Commission, resulting from the qualifications and the project evaluation, is required for the admission to the interview.

The following will be assessed:
1. The quality of the research project presented.
2. Research experience and scientific publications.
3. Thesis of the 5 or 4-year degree course, which has to be attached in PDF format.
4. Academic curriculum and degree mark.

The results of the qualifications evaluation will be available at least two days before the discussion.

Exam Syllabus

The interview will focus on the discussion of the research project and of the qualifications presented by the candidate with special reference to aspects of general research methodology, and data analysis techniques referred to the specific disciplinary contexts.

During the interview the knowledge of a foreign language will be tested.

Research Themes

- Methodology of social research.
- Evaluation of educational and social policies.
- Visual Sociology.
- Social disparities.
- Social policies.
- The youth situation.
- Dynamics of the labour market.
- Sociology of organizations and work.
- Sociology of science and technology.
- Sociology of cultural processes and communication.
- Sociology of deviance.
- Sociology of education.
- Sociology of the family.
- Urban sociology.
- Gender studies.

Information on references

Reference letters are not required. Nonetheless, any reference letters received will not be taken into consideration for the final score.

Foreign Languages

English or French or Spanish

Further Information

Prof. Luca Guzzetti
Dipartimento di Scienze della Formazione (DISFOR)
Corso Podestà 2
16128 Genova
luca.guzzetti@unige.it

Dott.ssa Francesca Figus
Dipartimento di Scienze della Formazione (DISFOR)
Course in: THE STUDY AND ENHANCEMENT OF THE HISTORICAL, ARTISTIC-ARCHITECTURAL AND ENVIRONMENTAL HERITAGE

Curriculum: HISTORY (CODE 7801)

<table>
<thead>
<tr>
<th>Coordinator: Cassata Francesco</th>
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</thead>
<tbody>
<tr>
<td>Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST)</td>
</tr>
<tr>
<td>Places: 8 – Grants: 6 (*)</td>
</tr>
</tbody>
</table>

(*) 6 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343,28.
The number of grants (6) and that of places without grant (2) refers to the doctoral research course in its entirety and not to the single curriculum.
The examining commission will be the same for all the curricula and will draw up a single merit list.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>4.7.2019 – 10.00 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), third floor, via Balbi 6, Genova.</td>
</tr>
</tbody>
</table>

Further information on how to present qualifications/publications

Besides the qualifications/publications requested in the public notice exam, candidates are requested to submit by means of the online procedure together with their applications:
a) the four year degree thesis, or specialist, or II level degree thesis (in pdf format) which will be evaluated;
b) any publications (in pdf format), which will be evaluated;
c) a brief description of the research project proposed by the candidate (maximum 30,000 strokes plus an annotated bibliography), which will be evaluated.
The project must be organized according to the following points: 1) Objectives; 2) Sources and state of the art; 3) Importance for the advancement of knowledge; 4) Proposed methodology; 5) A developmental work plan.

<table>
<thead>
<tr>
<th>Exam Syllabus</th>
<th>The interview will concern:</th>
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<tbody>
<tr>
<td></td>
<td>1) the qualifications/publications presented by the candidate;</td>
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<tr>
<td></td>
<td>2) the research project presented by the candidate;</td>
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<tr>
<td></td>
<td>3) the capacity to understand a passage taken from a history text, proposed by the examining commission, written in the foreign language chosen by the candidate.</td>
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<table>
<thead>
<tr>
<th>Research Themes</th>
<th>The History specialization includes:</th>
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<tbody>
<tr>
<td></td>
<td>a) a line of research of contemporary history, with special attention to the following issues: Euro-Atlantic relations, phenomena of transnationality and mobility, politics of memory and public history; the relationship between science, technology and society; visual history and culture; history of the environment and energy policies, gender history, ethno history;</td>
</tr>
<tr>
<td></td>
<td>b) a line of research of modern history, which concerns the history of Modern Europe in its different expressions (political-institutional history, the history of the territory, maritime history, military, cultural and religious history, with special attention to Italy and to the documentation heritage they refer to);</td>
</tr>
<tr>
<td></td>
<td>c) a line of research of medieval history, which concerns the medieval history of Europe in its various expressions (political-institutional history, the history of the territory, maritime history, military, cultural and religious history, with special attention to Italy and to the documentation heritage they refer to);</td>
</tr>
<tr>
<td></td>
<td>d) a line of research of the history and archeology of environmental resources, with research based on investigations of the territory and archives (ecologic history, landscapes and rural heritage).</td>
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<tr>
<td></td>
<td>e) a line of research of institutions, economics and society in the eastern European countries, with particular attention to sources.</td>
</tr>
</tbody>
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<tr>
<td>Further Information</td>
<td>Prof. Francesco Cassata (+39) 0102095741 <a href="mailto:francesco.cassata@unige.it">francesco.cassata@unige.it</a></td>
</tr>
</tbody>
</table>
Course in: THE STUDY AND ENHANCEMENT OF THE HISTORICAL, ARTISTIC-ARCHITECTURAL AND ENVIRONMENTAL HERITAGE

Curriculum: HISTORY AND PRESERVATION OF THE ARTISTIC AND ARCHITECTURAL HERITAGE (CODE 7807)

Coordinator: Cassata Francesco

Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST)

Places: 8 – Grants: 6 (*)

(*) 6 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,343.28.

The number of grants (6) and that of places without grant (2) refers to the doctoral research course in its entirety and not to the single curriculum.

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The project must be organized according to the following points:
1) Objectives;
2) Sources and state of the art;
3) Importance for the advancement of knowledge;
4) Proposed methodology;
5) A developmental work plan.

Exam Syllabus

The interview will concern:
1) the qualifications/publications presented by the candidate;
2) the research project presented by the candidate;
3) the capacity to understand a passage taken from a history text, proposed by the examining commission, written in the foreign language chosen by the candidate.

Research Themes

- 

Information on references

Reference letters are not required. Nonetheless, any reference letters received will not be taken into consideration for the final score.

Foreign Languages

French or English or Spanish

Further Information

Prof. Maria Clelia Galassi
(+39) 0102095035
mcgalassi@lettere.unige.it