<table>
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<tr>
<th>Course in: ARCHITECTURE AND DESIGN</th>
<th>.................................................................</th>
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<tr>
<td>Course in: BIOENGINEERING AND ROBOTICS</td>
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<td>Course in: BIOTECHNOLOGIES IN TRANSLATIONAL MEDICINE</td>
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</tr>
<tr>
<td>Course in: DIGITAL HUMANITIES. DIGITAL TECHNOLOGIES, ARTS, LANGUAGES. CULTURE AND COMMUNICATION</td>
<td>.................................................................</td>
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<tr>
<td>Course in: LAW STUDIES</td>
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<tr>
<td>Course in: ECONOMICS</td>
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<tr>
<td>Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE</td>
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<tr>
<td>Course in: PHYSICS</td>
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<tr>
<td>Course in: CLINICAL AND EXPERIMENTAL IMMUNOLOGY</td>
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<tr>
<td>Course in: COMPUTER SCIENCE AND SYSTEMS ENGINEERING</td>
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</tr>
<tr>
<td>Course in: CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING</td>
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<td>39</td>
</tr>
<tr>
<td>Course in: MACHINE AND SYSTEMS ENGINEERING FOR ENERGY, THE ENVIRONMENT AND TRANSPORT</td>
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<td>42</td>
</tr>
<tr>
<td>Course in: MECHANICAL, ENERGY AND MANAGEMENT ENGINEERING</td>
<td>........................................................................</td>
<td>45</td>
</tr>
<tr>
<td>Course in: JOINT DOCTORATE IN INTERACTIVE AND COGNITIVE ENVIRONMENTS (JD ICE)</td>
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<tr>
<td>Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES</td>
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</tr>
<tr>
<td>Course in: MATHEMATICS AND APPLICATIONS</td>
<td>..............................................................................</td>
<td>63</td>
</tr>
<tr>
<td>Course in: EXPERIMENTAL MEDICINE</td>
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<tr>
<td>Course in: NEUROSCIENCES</td>
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<tr>
<td>Course in: HEALTH SCIENCES</td>
<td>..................................................................................</td>
<td>73</td>
</tr>
<tr>
<td>Course in: SCIENCE AND TECHNOLOGY OF CHEMISTRY AND MATERIALS</td>
<td>.........................................................</td>
<td>79</td>
</tr>
<tr>
<td>Course in: SCIENCE AND TECHNOLOGY FOR THE ENVIRONMENT AND TERRITORY (STET)</td>
<td>.................................................</td>
<td>87</td>
</tr>
<tr>
<td>Course in: SCIENCE AND TECHNOLOGY FOR ELECTRICAL ENGINEERING, MARINE ENGINEERING, COMPLEX SYSTEMS FOR MOBILITY</td>
<td>..............................................................</td>
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<tr>
<td>Course in: SCIENCE AND TECHNOLOGY FOR ELECTRONIC AND TELECOMMUNICATION ENGINEERING</td>
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<td>95</td>
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<tr>
<td>Course in: SOCIAL SCIENCES</td>
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<td>101</td>
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<tr>
<td>Course in: THE STUDY AND ENHANCEMENT OF THE HISTORICAL, ARTISTIC-ARCHITECTURAL AND ENVIRONMENTAL HERITAGE</td>
<td>.............................................................</td>
<td>106</td>
</tr>
</tbody>
</table>
## Course in: ARCHITECTURE AND DESIGN

### Curriculum: ARCHITECTURE (CODE 6576)

| Coordinator: Gausa Navarro Manuel |
| Department of Architecture and Design (Dipartimento di Architettura e Design – DAD) |
| Places: 7 (°) – Grants: 4 (*) |
| (*) 3 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47. |
| (*) 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 € 13,638.47.* |
| (°) 2 places for grant holders from a foreign country. |
| **Comparative assessment procedure** | **QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS** |
| **Written test** | 3/7/2017 – 3 p.m. at the Department of Architecture and Design (DAD), Head Office, Stradone S. Agostino 37, 16123 Genova. |
| **Interview** | 4/7/2017 – 2 p.m. at the Department of Architecture and Design (DAD), Head Office, Stradone S. Agostino 37, 16123 Genova. |
| **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. |
| | - An interview based on the outcome of the written test and on the candidate’s research themes of interest. |
| | - 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: |
| | - urban and territorial policies; |
| | - theory of the project; |
| | - strategies and technologies for sustainability and the systemic project; |
| | - 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 (+39) 0102095810 dottoratodad@arch.unige.it http://www.addgenova.org/DSA/it |

* Grant added with Decree of Director of DAD n. 1726/2017
Course in: ARCHITECTURE AND DESIGN

Curriculum: DESIGN (CODE 6577)

| Coordinator: Gausa Navarro Manuel |
| Department of Architecture and Design (Dipartimento di Architettura e Design – DAD) |
| Places: 5 (*) – Grants: 3 (*) |

(*) 3 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

(*) 1 place for grant holders from a foreign country.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAM</th>
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</thead>
<tbody>
<tr>
<td>Written test</td>
<td>3/7/2017 – 3 p.m. at the Department of Architecture and Design (DAD), Head Office, Stradone S. Agostino 37, 16123 Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>4/7/2017 – 2 p.m. at the Department of Architecture and Design (DAD), Head Office, Stradone S. Agostino 37, 16123 Genova.</td>
</tr>
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</table>

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 - an interview based on the outcome of the written test and on the candidate’s research themes of interest.
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:
- urban and territorial policies;
- theory of the project;
- strategies and technologies for sustainability and the systemic project;
- 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
(+39) 0102095810
dottoratodad@arch.unige.it
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 - ITT)

Curriculum: ADVANCED AND HUMANOID ROBOTICS (CODE 6580)

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

| Places: | 13 – Grants: 13 (*) |
| (*) 13 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. |

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Further information on how to present qualifications/pubblications</td>
<td>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).</td>
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</table>

<table>
<thead>
<tr>
<th>Research themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Control of humanoid robots.</td>
</tr>
<tr>
<td>- Legged robots.</td>
</tr>
<tr>
<td>- Robot design for manipulation.</td>
</tr>
<tr>
<td>- Perception and learning.</td>
</tr>
<tr>
<td>- Teleoperation.</td>
</tr>
<tr>
<td>- Exoskeleton.</td>
</tr>
<tr>
<td>- Robot actuators.</td>
</tr>
<tr>
<td>- Multimodal perception.</td>
</tr>
<tr>
<td>- Robot assisted microsurgery.</td>
</tr>
<tr>
<td>- Assistive robots.</td>
</tr>
<tr>
<td>- Industrial robotics for inspection and maintenance.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Information on references</th>
</tr>
</thead>
<tbody>
<tr>
<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.biorob@dibbris.unige.it">phd.biorob@dibbris.unige.it</a>.</td>
</tr>
</tbody>
</table>

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>
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<tbody>
<tr>
<td>English</td>
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</table>

<table>
<thead>
<tr>
<th>Further information</th>
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</thead>
<tbody>
<tr>
<td>For information on the research themes relevant to the Advanced and Humanoid Robotics curriculum please contact:</td>
</tr>
<tr>
<td>Dott. Lorenzo Natale</td>
</tr>
<tr>
<td><a href="mailto:lorenzo.natale@iit.it">lorenzo.natale@iit.it</a></td>
</tr>
<tr>
<td>Dott. Ferdinando Cannella</td>
</tr>
<tr>
<td><a href="mailto:ferdinando.cannella@iit.it">ferdinando.cannella@iit.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: BIOENGINEERING AND BIOELECTRONICS (CODE 6578)

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

**Curriculum:** BIOENGINEERING AND BIOELECTRONICS (CODE 6578)

| **Places:** 6 | **Grants:** 4 (*)
| (*) 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. |

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<tr>
<th><strong>Comparative assessment procedure</strong></th>
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<tr>
<td>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).</td>
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<thead>
<tr>
<th><strong>Research themes</strong></th>
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<tbody>
<tr>
<td>- Biomedical imaging, Bioinformatics and medical information systems.</td>
</tr>
<tr>
<td>- Bioelectronics, biomedical devices and 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>Specific themes will be presented in an attachment available at the following address: <a href="http://phd.dibris.unige.it/biorob/index.php/how-to-apply">http://phd.dibris.unige.it/biorob/index.php/how-to-apply</a></td>
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<td>The name, status and service place of the referees chosen by the candidates must be stated in their applications.</td>
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<tr>
<th><strong>Further information</strong></th>
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<tbody>
<tr>
<td>For information on the research themes relevant to the Bioengineering and Bioelectronics curriculum please contact:</td>
</tr>
<tr>
<td>Prof. Sergio Martinoia</td>
</tr>
<tr>
<td><a href="mailto:sergio.martinoia@unige.it">sergio.martinoia@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 6579)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>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>
<tr>
<td>Grants</td>
<td>5 (*)</td>
</tr>
</tbody>
</table>

(*) 5 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.

<table>
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<tr>
<th>Table: Comparative assessment procedure</th>
<th>Qualifications/Publications</th>
</tr>
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</table>

| Research themes | - Cells-to-chip and chip-to-cells technologies.  
- Nanobiosensors.  
- Nanodiagnostics.  
- Advanced characterization and imaging tools.  
- Intelligent drug delivery.  
- Artificial tissues.  
- Functional nano-addressable surfaces.  
- Smart materials.  
Specific themes will be presented in an attachedment available at the following addresses: [http://phd.dibris.unige.it/biorob/index.php/how-to-apply](http://phd.dibris.unige.it/biorob/index.php/how-to-apply), [www.iit.it/phd-school](http://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](mailto: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:  
Dott. Francesco De Angelis  
francesco.deangelis@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 6581)

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

<table>
<thead>
<tr>
<th>Research themes</th>
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<tbody>
<tr>
<td>- The study of human sensorimotor and cognitive abilities with a focus on action execution and understanding.</td>
</tr>
<tr>
<td>- The implementation of sensorimotor and cognitive abilities in the humanoid robot iCub with a focus on human-robot cooperation.</td>
</tr>
<tr>
<td>- The exploitation of assistive technologies to alleviate sensory disabilities and the implementation of robotic rehabilitation devices with special attention on user requirements and strict clinical assessment.</td>
</tr>
<tr>
<td>- To investigate how integration between sensory and motor signals develops during childhood and identify solutions (technologies and rehabilitation procedures).</td>
</tr>
<tr>
<td>- To enhance the sensorimotor abilities necessary to orient and move in space, to communicate, to access everyday information and, therefore, to interact in social contexts.</td>
</tr>
<tr>
<td>- Testing and validating by means of human-centered techniques the devices (friendly and ergonomic) developed taking into consideration social and clinical contexts.</td>
</tr>
<tr>
<td>- To understand how humans socially attune to others, what are the conditions of social attunement with artificial agents and what types of cognitive mechanisms of the brain are activated during various types of social interactions with natural and artificial agents.</td>
</tr>
<tr>
<td>- To provide guidelines to roboticists regarding parameters of robot behaviour that facilitate social attunement on the side of the human counterpart.</td>
</tr>
<tr>
<td>- To contribute to the development of robot-assisted therapies for healthcare and care of the elderly by giving advice on the design of socially-attuned humanoid robots.</td>
</tr>
</tbody>
</table>

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

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

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

Dott.ssa Monica Gori monica.gori@iit.it

Dott.ssa Agnieszka Wykowska agnieszka.wykowska@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 6582)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Cannata Giorgio</th>
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</thead>
<tbody>
<tr>
<td>Polytechnic Section of the Department of IT, Bioengineering, Robotics and Systems Engineering (Sezione Politecnica del Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi – DIBRIS)</td>
<td></td>
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<tr>
<th>Places</th>
<th>4 – Grants: 3 (*)</th>
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<tbody>
<tr>
<td>(*) 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.</td>
<td></td>
</tr>
<tr>
<td>(*) 1 grant co-funded by MIUR/DIBRIS, 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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</tr>
</tbody>
</table>

**Comparative assessment procedure**

**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).

**Research themes**

- Cooperative robots.
- Coordination of teams and swarms of heterogeneous robots.
- Sensor based control of bimanual robots.
- Tactile sensing technologies.
- Obstacle detection of unmanned vessels.
- Robotics in the wharehouse.
- Culture-Aware Robots and Environmental Sensor Systems for Elderly Support*

Specific themes will be presented in an attachedment available at the following address: [http://phd.dibris.unige.it/biorob/index.php/how-to-apply](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

*amended on 7/7/2017
Course in: BIOTECHNOLOGIES IN TRANSLATIONAL MEDICINE

Curriculum: BIOIMAGING (CODE 6585)

| Coordinator: Quarto Rodolfo  
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 € 13,638.47. |
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<tbody>
<tr>
<td>Comparative assessment procedure</td>
</tr>
<tr>
<td>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</td>
</tr>
<tr>
<td>Interview</td>
</tr>
<tr>
<td>3/7/2017 – 2:00 pm at the Advanced Biotechnologies Centre (Centro di Biotecnologie Avanzate) in the Didactic Room (Aula Didattica) Tower A (Torre A), 3rd Floor, Largo R. Benzi, n. 10, 16132 Genova.</td>
</tr>
<tr>
<td>Further information on how to present qualifications/publications</td>
</tr>
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<td>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.</td>
</tr>
<tr>
<td>Exam Syllabus</td>
</tr>
<tr>
<td>The interview will be on the qualifications/publications and research project presented.</td>
</tr>
<tr>
<td>Research themes</td>
</tr>
</tbody>
</table>
| - 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 a scientific nature)  
Prof. Gianmario Sambuceti  
Department of Health Sciences (Dipartimento di Scienze della Salute)  
(+39) 0105552026  
gianmario.sambuceti@unige.it  
Organizing Secretarial Office (for information of a 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 6583)

<table>
<thead>
<tr>
<th><strong>Coordinator:</strong></th>
<th>Quarto Rodolfo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES)</td>
<td></td>
</tr>
</tbody>
</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 € 13,638.47.

<table>
<thead>
<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>3/7/2017 – 2:00 pm at the Advanced Biotechnologies Centre (Centro di Biotecnologie Avanzate) in the Didactic Room (Aula Didattica) Tower A (Torre A), 3rd Floor, Largo R. Benzi, n. 10, 16132 Genova.</td>
</tr>
</tbody>
</table>

**Further information on how to present qualifications/pubblications**  
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 therapy.  
- 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 a 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 a 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 6587)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Quarto Rodolfo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES)</td>
<td></td>
</tr>
<tr>
<td>Places:</td>
<td>1 – Grants:</td>
</tr>
<tr>
<td>(*) Grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
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<td>Interview</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.

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

Research themes: Experimental diagnostic and therapeutic approaches in general, specialist surgery, anaesthesiology and in integrated diagnostic methodologies.

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 a scientific nature)
Prof. Marco Frascio
Department of Integrated Surgical and Diagnostics Sciences (Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate – DISC)
(+39) 0103537217
mfrascio@unige.it

Organizing Secretarial Office (for information of a 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: REGENERATIVE MEDICINE AND TISSUE ENGINEERING (CODE 6584)

<table>
<thead>
<tr>
<th>Coordinator: 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>
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<tr>
<th>Places: 3(<em>) – Grants: 2(</em>)</th>
</tr>
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<tbody>
<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 € 13,638.47.</td>
</tr>
<tr>
<td>(*) 1 grant co-funded by MIUR/DIMES, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
</tr>
<tr>
<td>(*) 1 reserved for scholars in specific international mobility programs reserved for candidates selected within the project H2020 MSCA-ITN-016 &quot;CONTROLLING CARTILAGE TO BONE TRANSITIONS FOR IMPROVED TREATMENT OF BONE DEFECTS AND OSTEOARTHRITIS&quot; (CARBON).</td>
</tr>
</tbody>
</table>

<table>
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<tr>
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<td>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.</td>
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<th>Exam Syllabus</th>
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<tr>
<td>The interview will be on the qualifications/publications and research project presented.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Cellular therapy.</td>
</tr>
<tr>
<td>- Tissue engineering.</td>
</tr>
<tr>
<td>- Development of biocompatible biomaterials, biodegradable and capable of integrating molecules and cells.</td>
</tr>
<tr>
<td>- Delivery of growth factors, cytokines and other pharmacologically active molecules.</td>
</tr>
<tr>
<td>- Immunology and biology of transplants.</td>
</tr>
<tr>
<td>- Immunotherapy.</td>
</tr>
<tr>
<td>- Gene therapy.</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<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:rodolfo.quarto@unige.it">rodolfo.quarto@unige.it</a>.</td>
</tr>
<tr>
<td>The name, status and service place of the referees chosen by the candidates must be stated in their applications.</td>
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</table>

<table>
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<tr>
<th>Foreign languages</th>
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<tbody>
<tr>
<td>English</td>
</tr>
</tbody>
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<table>
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<tr>
<th>Further information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinator</td>
</tr>
<tr>
<td>Prof. Rodolfo Quarto (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558240 <a href="mailto:rodolfo.quarto@unige.it">rodolfo.quarto@unige.it</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact person for the Curriculum (for information of a scientific nature)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Paolo Giannoni (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558436 <a href="mailto:paolo.giannoni@unige.it">paolo.giannoni@unige.it</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organizing Secretarial Office (for information of a technical nature)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr Enrico Zeraschi (Dipartimento di Medicina Sperimentale - DIMES) (+39) 0105558266 <a href="mailto:enrico.zeraschi@unige.it">enrico.zeraschi@unige.it</a></td>
</tr>
</tbody>
</table>

*Information integrated following the DIMES Resolution of 19/5/2017 on the financing of an additional grant and Coordinator's Communication on 23/5/2017
Course in: BIOTECHNOLOGIES IN TRANSLATIONAL MEDICINE

Curriculum: TRANSLATIONAL AND PRECISION MEDICINE (CODE 6586)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Quarto Rodolfo</th>
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</thead>
<tbody>
<tr>
<td>Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES)</td>
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<tr>
<th>Places: 2 – Grants: 1 (*)</th>
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<tbody>
<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 € 13,638,47.</td>
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<td>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.</td>
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<table>
<thead>
<tr>
<th>Exam Syllabus</th>
<th>The interview will be on the qualifications/publications and research project presented.</th>
</tr>
</thead>
</table>
| Research themes | - Pathologies linked to ageing in the eye.  
- Chronic degenerative pathologies.  
- Cancer Biology and innovative therapeutic approaches.  
- Biological effects of the secretoma. |

| 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 a scientific nature)  
Prof.Lucia Del Mastro  
IRCCS AOU San Martino – IST  
(+39) 0105558908  
lucia.delmastro@hsanmartino.it |

| Organizing Secretarial Office (for information of a technical nature)  
Mr Enrico Zeraschi  
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES)  
(+39) 0105558266  
enrico.zeraschi@unige.it |
Course in: DIGITAL HUMANITIES. DIGITAL TECHNOLOGIES, ARTS, LANGUAGES. CULTURE AND COMMUNICATION
In agreement with the University of Turin

Curriculum: ARTS, PERFORMING ARTS AND MULTIMEDIA TECHNOLOGIES (CODE 6589)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Adorni Giovanni</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of modern languages and cultures (Dipartimento di Lingue e cultura moderne)</td>
<td></td>
</tr>
<tr>
<td>Places:</td>
<td>2 – Grants: 2 (*)</td>
</tr>
<tr>
<td>(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
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<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written test</td>
<td>3/7/2017 – 10 am at the Department of Italian, Romance, Ancient, Arts and Performing Arts Studies (Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo – DIRAAS), Via Balbi 2, 3rd Floor, Room 8 – 16126 Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>7/7/2017 – 2 pm at the Department of Modern Languages and Cultures (Dipartimento di Lingue e Culture Moderne), Library, piazza Santa Sabina 2, Genova.</td>
</tr>
<tr>
<td>Further information on how to present qualifications/pubblications</td>
<td>Candidates must attach a research project on Digital Humanities, coherent with the specific objectives of the curriculum, to their qualifications/publications.</td>
</tr>
</tbody>
</table>

| Exam Syllabus | Written test: the titles of the written papers will be chosen by the candidate from a series of three assigned topics, one for each theme listed in the “research themes”. These themes will be extracted from a set of nine titles (three for each thematic typology) prepared by the examining Commission. |

<table>
<thead>
<tr>
<th>Research themes</th>
<th>- Reflective criticism and applications of information and communication technologies to design, the arts and performing arts (multimedia and online drawing and design of systems and augmented reality environments; Virtual Museums; Ontologies; repertoires; Technologies and environments for research and the dissemination of research; platforms for the issuing of texts and films, design and development of multimedia and online products at both scientific and popular levels).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Riflessione critica e applicazioni delle tecnologie digitali al design, alle arti figurative e allo spettacolo (Formazione in rete; Progetto e sviluppo di prodotti multimediali e in rete; Analisi di corpora).</td>
</tr>
<tr>
<td></td>
<td>- Reflective criticism and applications of digital technologies to design, the arts and performing arts (Online education; Design and development of multimedia and online products; Corpus analysis).</td>
</tr>
<tr>
<td></td>
<td>- Critical reflection on the impact of ICT on paradigms of use, of experimental didactics and research in specific fields of the humanities.</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 email address: giovanni.adorni@unige.it and copy to the following addresses: migma@unige.it; 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 | Students 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 | Foreign candidates may do their interview via Skype on the basis of a specific request addressed to the Coordinator of the Doctoral Course at the email address giovanni.adorni@unige.it, copy to the addresses migma@unige.it; luisa.zito@unige.it. |

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

Curriculum: FOREIGN LANGUAGES, CULTURES AND DIGITAL TECHNOLOGIES (CODE 6590)

**Coordinator:** Adorni Giovanni  
Department of modern languages and cultures (Dipartimento di Lingue e culture moderne)

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

(*) 2 grants funded by the University of Turin, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

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

**Comparative assessment procedure**

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
</thead>
<tbody>
<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**

Candidates must attach a research project on Digital Humanities, coherent with the specific objectives of the curriculum, to their qualifications/publications.

**Exam Syllabus**

- Reflective criticism and applications of information and communication technologies to languages and cultures (the teaching of foreign languages and literatures; design and development of multimedia and online products, analysis and creation of literary, journalistic, translation corpora, etc.)
- Reflective criticism on the impact of digital technologies on paradigms of use, of experimental didactics and research in specific fields of the humanities. Exemplify, discuss, argue.

**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 email address: giovanni.adorni@unige.it and copy to the following addresses: carla.marello@unito.it; 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**

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

**Further information**

Foreign candidates may do their interview via Skype on the basis of a specific request addressed to the Coordinator of the Doctoral Course at the email address giovanni.adorni@unige.it, copy to the addresses carla.marello@unito.it; luisa.zito@unige.it.

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

Curriculum: LANGUAGES, CULTURES AND DIGITAL TECHNOLOGIES (CODE 6588)

Coordinator: Adorni Giovanni
Department of modern languages and cultures (Dipartimento di Lingue e culture moderne)

<table>
<thead>
<tr>
<th>Places</th>
<th>4 – Grants: 4 (*)</th>
</tr>
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</table>
| (*) 3 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.  
(*) 1 grant funded by the Institute for Didactic Technologies (Istituto per le Tecnologie Didattiche – ITD) of the National Research Council (Consiglio Nazionale delle Ricerche – CNR), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47. |

An additional place will be announced within the MCI–Mobility CONFAP Italy-Brazil programme. The application must be presented according to the instructions described at the following website: http://www.mci.unibo.it/en/brazilian-candidates

Comparative assessment procedure

QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS

Written test
4/7/2017 – 10 am at the Department of Modern Languages and Cultures (Dipartimento di Lingue e culture moderne), Library, piazza Santa Sabina 2, Genova.

Interview
7/7/2017 – 8:30 am at the Department of Modern Languages and Cultures (Dipartimento di Lingue e culture moderne), Library, piazza Santa Sabina 2, Genova.

Further information on how to present qualifications/publications
Candidates must attach a research project on Digital Humanities, coherent with the specific objectives of the curriculum, to their qualifications/publications.

Exam Syllabus
Written test: the titles of the written papers will be chosen by the candidate from a series of three assigned topics, one for each theme listed in the “research themes”. These themes will be extracted from a set of nine titles (three for each thematic typology) prepared by the examining Commission.

Research themes
- Reflective criticism and applications of information and communication technologies to the humanities and to material and immaterial cultural heritage (drawing and design of multimedia and online systems and augmented reality environments; Semantic Web; Ontologies; Internet of Things; Smart objects and Smart environments; Representation of Knowledge; Man-Machine Interaction; Processing of Natural Language; Technologies and environments for research and the dissemination of research).
- Reflective criticism and applications of digital technologies to languages and cultures (Online education; Research in the field of linguistics, onomastics and literature; Design and development of multimedia and online products; Corpus analysis).
- Critical reflection on the impact of ICT on paradigms of use, of experimental didactics and research in specific fields 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 email addresses: giovanni.adorni@unige.it and copy to the following addresses: elisa.bricco@unige.it; 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
Students 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
Foreign candidates may do their interview via Skype on the basis of a specific request addressed to the Coordinator of the Doctoral Course at the email address giovanni.adorni@unige.it, copy to the following addresses elisa.bricco@unige.it; luisa.zito@unige.it.

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

**Curriculum:** LINGUISTICS, APPLIED LINGUISTICS AND ONOMASTICS (CODE 6591)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Adorni Giovanni</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of modern languages and cultures (Dipartimento di Lingue e culture moderne)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Places</th>
<th>2 – Grants: 1 (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(*) 1 grant funded by the University of Turin, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638,47.</td>
<td></td>
</tr>
</tbody>
</table>

At the end of the Doctoral Course a dual qualification will be awarded by the University of Genova and the University of Turin.

**Comparative assessment procedure**

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Written test</strong></td>
</tr>
<tr>
<td>5/7/2017 – 10 at the Department of Foreign Languages and Literatures and Modern Cultures (Dipartimento di Lingue e letterature straniere e culture moderne), via Verdi 10, 10124 Turin.</td>
</tr>
<tr>
<td><strong>Interview</strong></td>
</tr>
<tr>
<td>10/7/2017 – 12 at the Department of Foreign Languages and Literatures and Modern Cultures (Dipartimento di Lingue e letterature straniere e culture moderne), via Verdi 10, 10124 Turin.</td>
</tr>
</tbody>
</table>

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

Candidates must attach a research project on Digital Humanities, coherent with the specific objectives of the curriculum, to their qualifications/publications.

**Exam Syllabus**

Written test: the titles of the written papers will be chosen by the candidate from a series of three assigned topics, one for each theme listed in the “research themes”. These themes will be extracted from a set of nine titles (three for each thematic typology) prepared by the examining Commission.

**Research themes**

- Digital technologies for research in applied and theoretical linguistics and their impact on paradigms of use of experimental didactics and research in specific linguistic fields. Exemplify, discuss, argue.
- Phonology of endangered languages: theoretical and practical problems and analytical tools.

**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 email address: giovanni.adorni@unige.it and copy to the following addresses: carla.marello@unito.it; 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**

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

**Further information**

Foreign candidates may do their interview via Skype on the basis of a specific request addressed to the Coordinator of the Doctoral Course at the email address giovanni.adorni@unige.it, copy to the addresses carla.marello@unito.it; luisa.zito@unige.it.

The contact person in administration for the doctoral course is Mrs Luisa Zito (luisa.zito@unige.it).
## Course in: LAW STUDIES

### Curriculum: CIVIL, CORPORATE AND INTERNATIONAL LAW (CODE 6592)

| **Coordinator:** Ivaldi Paola  
Department of Law Studies (Dipartimento di Giurisprudenza) |
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Places:</strong> 3 – <strong>Grants:</strong> 3 (*)</td>
</tr>
<tr>
<td>(*) 3 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
</tr>
<tr>
<td><strong>Comparative assessment procedure</strong></td>
</tr>
<tr>
<td><strong>Interview</strong></td>
</tr>
<tr>
<td><strong>Further information on how to present qualifications/publications</strong></td>
</tr>
<tr>
<td><strong>Exam Syllabus</strong></td>
</tr>
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<td></td>
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<tr>
<td></td>
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<tr>
<td><strong>Research themes</strong></td>
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<td></td>
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<tr>
<td><strong>Information on references</strong></td>
</tr>
<tr>
<td></td>
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<tr>
<td><strong>Foreign languages</strong></td>
</tr>
<tr>
<td><strong>Further information</strong></td>
</tr>
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</tbody>
</table>
**Course in: LAW STUDIES**

**Curriculum: INTERNAL CONSTITUTIONAL, COMPARATIVE AND EUROPEAN LAW (CODE 6595)**

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Ivaldi Paola</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Law Studies (Dipartimento di Giurisprudenza)</td>
<td></td>
</tr>
<tr>
<td><strong>Places:</strong></td>
<td>2 – <strong>Grants:</strong> 2 (*)</td>
</tr>
<tr>
<td>(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
<td></td>
</tr>
<tr>
<td><strong>Modalità</strong></td>
<td>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</td>
</tr>
<tr>
<td><strong>Written test</strong></td>
<td>5/7/2017 – 8:30 am at the Department of Law Studies (Dipartimento di Giurisprudenza), Section Constitutional Law, 3rd floor, via Balbi 22, Genova. The list of candidates admitted to the tests will be announced by 12 noon on the 4/7/2017 on the notice board of the Department, via Balbi 22 and published online at the address: <a href="http://www.costituzionale.unige.it">www.costituzionale.unige.it</a>.</td>
</tr>
<tr>
<td><strong>Interview</strong></td>
<td>7/7/2017 – 8:30 at the Department of Law Studies (Dipartimento di Giurisprudenza), Section Constitutional Law, 3rd floor, via Balbi 22, Genova.</td>
</tr>
<tr>
<td><strong>Further information on how to present qualifications/pubblications</strong></td>
<td>The following must be produced in the curriculum and attached documentation:</td>
</tr>
<tr>
<td>- degree mark</td>
<td></td>
</tr>
<tr>
<td>- the marks of the exams of the degree course;</td>
<td></td>
</tr>
<tr>
<td>- the date of enrolment and of the degree;</td>
<td></td>
</tr>
<tr>
<td>The following also must be produced:</td>
<td></td>
</tr>
<tr>
<td>- the dissertation title and index of the specialist or “magistrale” degree (3+2 or 5 year degree course);</td>
<td></td>
</tr>
<tr>
<td>- the level of language knowledge.</td>
<td></td>
</tr>
<tr>
<td><strong>Exam Syllabus</strong></td>
<td>The interview aims at evaluating:</td>
</tr>
<tr>
<td>- general preparation in the curricula sectors</td>
<td></td>
</tr>
<tr>
<td>- aptitude for research</td>
<td></td>
</tr>
<tr>
<td>- and will be based on the candidates’ present competences and on the basis of a research project. The latter must be presented with the candidates’ application, clearly indicating: the scientific starting point, a basic bibliography, the organization of the thematic profiles they intend to examine.</td>
<td></td>
</tr>
<tr>
<td>The entrance tests aim at evaluating: Le prove d’ingresso tendono a valutare:</td>
<td></td>
</tr>
<tr>
<td>- general preparation in the curricula sectors</td>
<td></td>
</tr>
<tr>
<td>- aptitude for research</td>
<td></td>
</tr>
<tr>
<td>The general preparation of candidates will be verified by means of:</td>
<td></td>
</tr>
<tr>
<td>- a written test which consists in writing a note to a decision of the Constitutional Court, or of the European Court of Human Rights or of the Court of Justice of the EU;</td>
<td></td>
</tr>
<tr>
<td>- questions to be answered orally on the following subjects relative to the curriculum: domestic and European constitutional law and constitutional comparison.</td>
<td></td>
</tr>
<tr>
<td>Aptitude for research will be evaluated on the basis of a research project, coherent with the research themes of the curriculum, which must be presented with the candidates’ application. The project must clearly indicate: the scientific starting point, a basic bibliography, the organization of the thematic profiles that will be examined and the expected results.</td>
<td></td>
</tr>
<tr>
<td><strong>Research themes</strong></td>
<td>- Historical and institutional evolution of the contemporary State.</td>
</tr>
<tr>
<td>- Theory of the forms of State and government also from a comparative perspective.</td>
<td></td>
</tr>
<tr>
<td>- Federalism and regionalism also from a comparative perspective.</td>
<td></td>
</tr>
<tr>
<td>- Constitutional justice also from a comparative perspective.</td>
<td></td>
</tr>
<tr>
<td>- National and supranational protection system of fundamental rights</td>
<td></td>
</tr>
<tr>
<td>- Constitutionalization process of the European Union and constitutional principles of supranational and international organizations.</td>
<td></td>
</tr>
<tr>
<td>- Sources of domestic, EU and international law.</td>
<td></td>
</tr>
<tr>
<td>- Constitutional revision. Constitutional and institutional reform.</td>
<td></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 Prof. Pasquale Costanzo: <a href="mailto:pasquale.costanzo@unige.it">pasquale.costanzo@unige.it</a>.</td>
</tr>
<tr>
<td>The name, status and service place of the referees chosen by the candidates must be stated in their applications.</td>
<td></td>
</tr>
<tr>
<td>Foreign languages</td>
<td>English</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------</td>
</tr>
</tbody>
</table>
| **Further information** | Contact person for the curriculum  
Prof. Pasquale Costanzo  
pasquale.costanzo@unige.it. |
Course in: LAW STUDIES

Curriculum: CRIMINAL LAW AND PROCEDURE (CODE 6593)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Ivaldi Paola</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
<td>Law Studies (Dipartimento di Giurisprudenza)</td>
</tr>
<tr>
<td>Places:</td>
<td>3 – Grants: 2 (*)</td>
</tr>
<tr>
<td></td>
<td>(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
</tr>
<tr>
<td>Modalità</td>
<td>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</td>
</tr>
<tr>
<td>Written test</td>
<td>4/7/2017 – 9 am at the University of Genova, Room Poggi (Aula Poggi), via Balbi 5, Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>6/7/2017 – 9 am at the Department of Law Studies (Dipartimento di Giurisprudenza), Criminal Law Section (Sezione Penalistica), via Balbi 30/1, Genova.</td>
</tr>
<tr>
<td>Exam Syllabus</td>
<td>- Issues concerning the general part and the special part of Criminal Law.</td>
</tr>
<tr>
<td></td>
<td>- Issues concerning criminal trials, also in reference to the European, International and comparative perspective.</td>
</tr>
<tr>
<td>Research themes</td>
<td>- Criminal Law: the reform of the criminal code and the harmonization of European criminal laws, with a view to the unification and strengthening of international instruments of cooperation; the reform of the sanctioning systems and of the statute of limitations; forms of transnational criminality; the criminal defence of financial markets; corporate offences; analysis of the themes concerning complicity of people; the regulation of the circulation of citizens who belong to the European Union; crimes against the public administration.</td>
</tr>
<tr>
<td></td>
<td>- Penitentiary law: themes that have been the object of recent legislative interventions, in parallel with the evolution of case law. The following are reported: the progressive erosion of criminal decisions; probation measures offered to defendants of age; the law projects for the reform of the system of criminal appeals, those concerning wiretapping.</td>
</tr>
<tr>
<td></td>
<td>- Comparative Procedural Criminal Law mainly focussing on the American trial system.</td>
</tr>
<tr>
<td></td>
<td>- International Procedural Criminal Law: Evolution of international criminal justice from the end of the First World War up to the present; the International Criminal Court and the legislation for internal adaptation; International cooperation tendencies at European level; transitional justice.</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</td>
</tr>
<tr>
<td>Further information</td>
<td>Contact person for the curriculum Prof. Paolo Pisa <a href="mailto:paolo.pisa@unige.it">paolo.pisa@unige.it</a></td>
</tr>
<tr>
<td></td>
<td>Contact person in administration: Dott.ssa M. Stefania Lavezzo <a href="mailto:55563@unige.it">55563@unige.it</a></td>
</tr>
</tbody>
</table>
### Course in: LAW STUDIES

### Curriculum: PHILOSOPHY OF LAW AND HISTORY OF LEGAL CULTURE (CODE 6594)

<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)</td>
<td></td>
</tr>
<tr>
<td>Places:</td>
<td>4 (<em>) – Grants: 3 (</em>)</td>
</tr>
</tbody>
</table>

(*) 1 place reserved for grant holders from foreign countries.

(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

(*) 1 grant from MIUR/DIGI funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

#### Comparative assessment procedure

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidates must present a research project (of about 10,000 strokes, spaces included, in order to be accepted), indicating the subject, the objectives, the activity phases of the research, as well as the references deemed essential.</td>
</tr>
</tbody>
</table>

The following must be produced in the curriculum and attached documentation:

- a) qualification;
- b) any post-graduate qualifications;
- c) any publications;
- d) any research experiences and research activities and further education/training.

#### Research themes

- Philosophy of law
- Legal reasoning
- Theories of legal interpretation
- Theories of legal sources
- General theory of law and state
- Constitutional interpretation
- Logic and legal reasoning
- Legal Enlightenment and codification ideologies
- Philosophies of punishment
- Epistemology and theories of legal science
- Natural law and legal positivism - Feminist theories of law
- Theories of legal norms and legal systems
- Theory of legal language
- Equality, poverty, welfare state, regulation and deregulation
- History and theory of rights
- Law, constitutions, constitutionalism
- History and theory of legal dogmatics
- Legal bioethics.

#### 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 pierluigi.chiassoni@giuri.unige.it and copy to Dott.ssa Stefania Vircillo stefania.vircillo@giuri.unige.it.

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

#### Further information

Contact person for the curriculum
Prof. Pierluigi Chiassoni
pierluigi.chiassoni@unige.it

Contact person in administration
Dott.ssa Stefania Vircillo
stevirci@giuri.unige.it
**Course in:** ECONOMICS (CODE 6596)

**Coordinator:** Bottasso Anna  
Department of Economics (Dipartimento di Economia – DIEC)

**Places:** 7 – **Grants:** 5 (*)

(*) 5 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

An additional place in co-tutorship will be announced within the ERC-funded Dual Doctoral Award programme with the University of Exeter and the University of Genova within Average - Transaction Costs and Risk Management during the First Globalization (Sixteenth -Eighteenth Centuries) project. The application must be presented according to the instructions described at the following website:  
http://www.exeter.ac.uk/postgraduate/money/fundingsearch/awarddetails/?id=2608

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Written test</strong></td>
<td>5/7/2017 – 10 am at the Department of Economics (Dipartimento di Economia – DIEC) Room “Estremo Ponente” (former Cenpro), via Vivaldi 5, Genova.</td>
</tr>
<tr>
<td><strong>Interview</strong></td>
<td>6/7/2017 – 10 am at the Department of Economics (Dipartimento di Economia – DIEC), Room “Estremo Ponente” (former Cenpro), via Vivaldi 5, Genova.</td>
</tr>
<tr>
<td><strong>Further information on how to present qualifications/publications</strong></td>
<td>Candidates may present, together with their applications, any publications in scientific journals on research themes which are relevant to the doctoral course.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exam Syllabus</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Written test</strong></td>
<td>one question chosen by each candidate from a set of 3 questions on research themes of the Doctoral Course.</td>
</tr>
<tr>
<td><strong>Oral test</strong></td>
<td>interview on the research themes proposed by the candidate. The Commission may also ask the candidate to comment and discuss the contents of his/her written test.</td>
</tr>
<tr>
<td><strong>During the oral test candidates will be asked to show their knowledge of English by reading and translating an English text on economics.</strong></td>
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<table>
<thead>
<tr>
<th>Research themes</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
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</thead>
<tbody>
<tr>
<td>The research themes concern the main topics of theoretical and applied Microeconomics and Macroeconomics, analysed in light of the recent developments in literature.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Information on references</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<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: Prof. Anna Bottasso, Università di Genova, DIEC, via Vivaldi 5, 16126 Genova. Or via email to the following address <a href="mailto:dottoratodiec@economia.unige.it">dottoratodiec@economia.unige.it</a>.</td>
<td></td>
</tr>
<tr>
<td>The name, status and service place of the referees chosen by the candidates must be stated in their applications.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Foreign languages</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</td>
</tr>
</tbody>
</table>
Course in: **HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE**

**Curriculum:** TRANSLATIONAL HAEMATOLOGY (CODE 6599)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Ballestrero Alberto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI)</td>
<td></td>
</tr>
</tbody>
</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 € 13,638.47.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written test</td>
<td>5/7/2017 – 9 am at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Room C, viale Benedetto XV 6, 16132 Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>5/7/2017 – 2 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Room Multimedia, viale Benedetto XV 6, 16132 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. English knowledge will be ascertained with a short reading and translation test.

**Research themes**
- Minimal residual disease in acute leukaemias as a prognostic factor and tool for therapeutic choices.
- Study of the pathogenesis of acute lymphoid leukaemias.
- Molecular analysis of leukaemias and multiple myeloma.
- 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. Alberto Ballestrero, DIMI, viale Benedetto XV 6, Genova. Or via email to Prof. Alberto Ballestrero ballestrero@unige.it and to Prof. Marco Gobbi gobbi@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. Marco Gobbi gobbi@unige.it
Prof. Alberto Ballestrero ballestrero@unige.it
## Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

### Curriculum: CLINICAL PATHOPHYSIOLOGY OF ENDOCRINE AND METABOLIC DISORDERS (CODE 6662)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Ballestrero Alberto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
<td>Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI)</td>
</tr>
<tr>
<td>Places</td>
<td>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 € 13,638.47.</td>
<td></td>
</tr>
<tr>
<td>Comparative assessment procedure</td>
<td>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</td>
</tr>
<tr>
<td>Written test</td>
<td>6/7/2017 – 9 am at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Room D, ground floor, viale Benedetto XV 6, Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>6/7/2017 – 2 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Room D, ground floor, 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>
<tr>
<td>Research themes</td>
<td>- Physiopathology of hypophyseal secretions, with special regard to the hypothalamus-somatotropin-prolactin axis and to the IGF1 system.</td>
</tr>
<tr>
<td></td>
<td>- Physiopathology of receptors for somatostatin in neuroendocrine tumours.</td>
</tr>
<tr>
<td></td>
<td>- Epidemiological and clinical aspects of thyroid nodules even in relation to iodine supply.</td>
</tr>
<tr>
<td></td>
<td>- Cellular mechanisms of insulin action and other growth factors.</td>
</tr>
<tr>
<td></td>
<td>- Physiopathology of insulin resistance and diabetes type II.</td>
</tr>
<tr>
<td>Information on references</td>
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</tr>
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<td></td>
<td>The name, status and service place of the referees chosen by the candidates must be stated in their applications.</td>
</tr>
<tr>
<td>Foreign languages</td>
<td>English</td>
</tr>
<tr>
<td>Further information</td>
<td>Contact professors: Prof. Marcello Bagnasco <a href="mailto:bagnasco@csita.unige.it">bagnasco@csita.unige.it</a></td>
</tr>
<tr>
<td></td>
<td>Prof. Renzo Cordera <a href="mailto:record@unige.it">record@unige.it</a></td>
</tr>
<tr>
<td></td>
<td>Prof. Diego Ferone <a href="mailto:ferone@unige.it">ferone@unige.it</a></td>
</tr>
</tbody>
</table>
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: CLINICAL PATOPHYSIOLOGY OF RENAL, CARDIOVASCULAR AND ARTERIAL HYPERTENSIVE DISEASES (CODE 6602)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Ballestrero Alberto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
<td>DiMedicina interna e Specialità mediche – DIMI</td>
</tr>
<tr>
<td>Places</td>
<td>2 – 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 € 13,638.47.</td>
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</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
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</thead>
<tbody>
<tr>
<td>Written test</td>
<td>6/7/2017 – 9 am at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Room D, ground floor, viale Benedetto XV 6, Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>6/7/2017 – 2 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Room D, ground floor, 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>
<tr>
<td></td>
<td>- Microalbuminuria/proteinuria as predictors of renal and cardiovascular damage and light renal dysfunctions.</td>
</tr>
<tr>
<td></td>
<td>- Pathophysiological and pathogenic aspects of coronary and aortic atherosclerosis disease.</td>
</tr>
<tr>
<td></td>
<td>- Atherosclerosis and innate and acquired immunity.</td>
</tr>
<tr>
<td>Information on references</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: Prof. Alberto Ballestrero, DIMI, viale Benedetto XV 6, Genova. Or via email to the following address: <a href="mailto:aballestrero@unige.it">aballestrero@unige.it</a>.</td>
</tr>
<tr>
<td></td>
<td>The name, status and service place of the referees chosen by the candidates must be stated in their applications.</td>
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<td>Foreign languages</td>
<td>English</td>
</tr>
<tr>
<td>Further information</td>
<td>Contact professors:</td>
</tr>
<tr>
<td></td>
<td>Prof. Marcello Bagnasco</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:bagnasco@csita.unige.it">bagnasco@csita.unige.it</a></td>
</tr>
<tr>
<td></td>
<td>Prof. Giacomo Garibotto</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:gari@unige.it">gari@unige.it</a></td>
</tr>
</tbody>
</table>
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: CLINICAL AND EXPERIMENTAL RESPIRATORY PATHOPHYSIOLOGY (CODE 6663)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Ballestrero Alberto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI)</td>
<td></td>
</tr>
<tr>
<td>Places: 1 – Grants: 1 (*)</td>
<td></td>
</tr>
<tr>
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</thead>
</table>

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<thead>
<tr>
<th>Written test</th>
<th>6/7/2017 – 9 am at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Room D, ground floor, viale Benedetto XV 6, Genova.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>6/7/2017 – 2 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Room D, ground floor, 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>
<th>- The relationships between allergic inflammations and bronchomotricity, study of pharmacological and immunotherapeutic effects on allergic inflammation and on bronchial reactivity.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Function and structure of the bronchial part: study of inflammatory and remodelling processes.</td>
</tr>
<tr>
<td></td>
<td>- Mechanisms of bronchial obstruction at rest and under stress: clinical physiopathology and instrumental tests of the respiratory function.</td>
</tr>
<tr>
<td></td>
<td>- Advanced therapeutic strategies in allergology and pneumology.</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. Alberto Ballestrero, DIMI, viale Benedetto XV 6, Genova. Or via email to the following address: aballestrero@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. Marcello Bagnasco bagnasco@csita.unige.it Prof. Anna Maria Riccio anna.maria.riccio@unige.it |
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: ONCOLOGICAL GENETICS AND MOLECULAR PATHOLOGY (CODE 6597)

**Coordinator:** Ballestrero Alberto

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

**Places:** 1 – **Grants:** 1 (*)

(*) 1 grant from MIUR/DIMI funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

<table>
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<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Written test</strong></td>
<td>5/7/2017 – 9 at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Room C, viale Benedetto XV 6, 16132 Genova.</td>
</tr>
<tr>
<td><strong>Interview</strong></td>
<td>5/7/2017 – 2 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Room Multimedia, viale Benedetto XV 6, 16132 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.</td>
</tr>
<tr>
<td></td>
<td>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>
<tr>
<td></td>
<td>English knowledge will be ascertained with a short reading and translation test.</td>
</tr>
<tr>
<td><strong>Research themes</strong></td>
<td>Determination of genes involved in the onset, progression and metastasis phase of the neoplasia by means of studies at tissue level for the development of tumourigenesis and targeted therapy.</td>
</tr>
<tr>
<td></td>
<td>Evaluation of predisposition to the development of tumours. Studies on high and low penetrance susceptibility genes and new models to calculate the risk.</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. Alberto Ballestrero, DIMI, viale Benedetto XV 6, Genova. Or via email to Prof. Alberto Ballestrero aballestrero@unige.it and to Prof. Paola Ghiorzo paola.ghiorzo@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. Paola Ghiorzo paola.ghiorzo@unige.it
**Course in:** HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE  

**Curriculum:** GERONTOLOGY, PATHOPHYSIOLOGY OF GERIATRIC DISEASES AND ANTI-AGEING MEDICINE  
(CODE 6664)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Ballestrero Alberto</th>
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</thead>
<tbody>
<tr>
<td>Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI)</td>
<td></td>
</tr>
<tr>
<td><strong>Places:</strong> 2 – <strong>Grants:</strong> 2 (*)</td>
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<tr>
<td><strong>Interview</strong></td>
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**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**  
- Clinical and instrumental evaluation of senile osteoporosis.  
- Clinical geriatric oncology: the assessment scales.  
- Pathophysiology and assessment of sarcopenia in the elderly.  
- Pathophysiology of “Fragility in the Elderly” in biochemical markers.

**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. Alberto Ballestrero, DIMI, viale Benedetto XV 6, Genova. Or via email to the following address: aballestrero@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. Marcello Bagnasco  
*bagnasco@csita.unige.it*  

Prof. Patrizio Odetti  
*odetti@unige.it*
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: AUTOIMMUNE AND AUTOINFLAMMATORY DISEASES: PATHOPHYSIOLOGICAL AND DIAGNOSTIC ASPECTS (CODE 6601)

<table>
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</table>

<table>
<thead>
<tr>
<th>Research themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Immunoregulation and autoimmunity: the role of molecular mechanisms of co-stimulation.</td>
</tr>
<tr>
<td>- Laboratory diagnostics of systemic and organ-specific autoimmune diseases.</td>
</tr>
<tr>
<td>- Autoimmune thyroid pathologies, celiac disease, autoimmune gastritis and multi-autoimmune syndromes: epidemiological, immunological and genetic aspects.</td>
</tr>
<tr>
<td>- Autoinflammation and autoimmunity: innate and acquired immunity and cardiocirculatory decompensation, role of the endothelium.</td>
</tr>
<tr>
<td>- New immunological markers of autoimmune diseases.</td>
</tr>
</tbody>
</table>

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<tr>
<td>Contact professors:</td>
</tr>
<tr>
<td>Prof. Marcello Bagnasco</td>
</tr>
<tr>
<td><a href="mailto:bagnasco@csita.unige.it">bagnasco@csita.unige.it</a></td>
</tr>
<tr>
<td>Prof. Giampaola Pesce</td>
</tr>
<tr>
<td><a href="mailto:pescegpl@unige.it">pescegpl@unige.it</a></td>
</tr>
</tbody>
</table>
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: DISEASES OF THE DIGESTIVE SYSTEM AND OF THE LIVER (CODE 6600)

<table>
<thead>
<tr>
<th>Coordinator: Ballestrero Alberto</th>
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</thead>
<tbody>
<tr>
<td>Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI)</td>
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</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
- Helicobacter Pylori infection: role in functional dyspepsia, resistance in eradicating therapies, association with extradigestive pathologies.
- 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.
- Structure and physiology of the stomatognathic system: morphology of the different components in relation to function, dissection techniques of the head and neck structures.
- Epidemiology of oral diseases: incidence, preponderance, correlation with the general state of health and with systemic diseases.

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. Alberto Ballestrero, DIMI, viale Benedetto XV 6, Genova. Or via email to the following address: aballestrero@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. Marcello Bagnasco
bagnasco@csita.unige.it

Prof. Vincenzo Savarino
vsavarin@unige.it
Course in: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: TRANSLATIONAL ONCOLOGY (CODE 6598)

<table>
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<tr>
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<td>Written test</td>
<td>5/7/2017 – 9 am at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Room C, viale Benedetto XV 6, 16132 Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>5/7/2017 – 2 pm at the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI), Room C, viale Benedetto XV 6, 16132 Genova.</td>
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| 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. |

<table>
<thead>
<tr>
<th>Research themes</th>
<th>- Monitoring of solid neoplasias by analyzing circulating nucleic acids.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Study of the molecular prognostic and predictive factors of the response of solid neoplasias.</td>
</tr>
<tr>
<td></td>
<td>- Pre-clinical studies of associations between/among new antineoplastic drugs.</td>
</tr>
<tr>
<td></td>
<td>- Pre-clinical and clinical experiments in translational oncology.</td>
</tr>
<tr>
<td></td>
<td>- Innovative therapeutic approaches in the treatment of solid tumours and haematological neoplasias.</td>
</tr>
<tr>
<td></td>
<td>- Tumour pathology as the pathology of the molecular networks of control.</td>
</tr>
<tr>
<td></td>
<td>- Study of the molecular and pathogenic aspects of cardiotoxicity due to antiblastic drugs.</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 Coordinator of the Doctoral Course: Prof. Alberto Ballestrero, DIMI, viale Benedetto XV 6, Genova. Or via email to the following address: <a href="mailto:aballestrero@unige.it">aballestrero@unige.it</a>.</th>
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<th>Further information</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Prof. Alberto Ballestrero <a href="mailto:aballestrero@unige.it">aballestrero@unige.it</a></td>
</tr>
<tr>
<td></td>
<td>Prof. Francesco Boccardo <a href="mailto:f.boccardo@unige.it">f.boccardo@unige.it</a></td>
</tr>
</tbody>
</table>
Course in: PHYSICS (CODE 6567)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Petrolini Alessandro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Physics (Dipartimento di Fisica – DIFI)</td>
<td></td>
</tr>
<tr>
<td>Places: 14 – Grants: 12 (*)</td>
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</tr>
<tr>
<td>(*) 6 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,000,00.</td>
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</tr>
<tr>
<td>(*) 1 grant cofunded by the Department of Physics (Dipartimento di Fisica - DIFI) on an ERC programme and by the “Scuola Universitaria Professionale della Svizzera Italiana (SUPSI)”, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 15,000,00.</td>
<td></td>
</tr>
<tr>
<td>(*) 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 € 15,000,00.</td>
<td></td>
</tr>
<tr>
<td>(*) 4 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>
<td></td>
</tr>
<tr>
<td>Comparative assessment procedure</td>
<td>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</td>
</tr>
<tr>
<td>Interview</td>
<td>6/7/2017 – 8:30 am at the presso Department of Physics (Dipartimento di Fisica – DIFI), via Dodecaneso 33, 16146 Genova.</td>
</tr>
<tr>
<td>Further information on how to present qualifications/publications</td>
<td>Each candidate must present the research project they intend to work on during the three years of the Doctoral Course. The project must be described in English or in Italian and have not more than 5000 strokes. The Teaching Body reserves the right to assess the equivalence of the “laurea magistrale” (5-year degree course) with degree qualifications obtained abroad.</td>
</tr>
<tr>
<td>Exam Syllabus</td>
<td>- Discussion of Qualifications/Publications.</td>
</tr>
<tr>
<td></td>
<td>- Discussion of the 5-year degree course dissertation.</td>
</tr>
<tr>
<td></td>
<td>- Presentation and discussion of the proposed research project.</td>
</tr>
<tr>
<td></td>
<td>- Discussion on Basic Physics topics.</td>
</tr>
<tr>
<td>Research themes</td>
<td>The research themes for the 6 University grants and for the INFN grant are:</td>
</tr>
<tr>
<td></td>
<td>- Theoretical and experimental physics of fundamental interactions.</td>
</tr>
<tr>
<td></td>
<td>- Experimental and theoretical physics of matter.</td>
</tr>
<tr>
<td></td>
<td>- Applied Physics.</td>
</tr>
<tr>
<td></td>
<td>- Astronomy, astrophysics and astroparticle.</td>
</tr>
<tr>
<td></td>
<td>The research themes for the 4 IIT grants are:</td>
</tr>
<tr>
<td></td>
<td>- Augmented Expansion Microscopy.</td>
</tr>
<tr>
<td></td>
<td>- Mueller matrix microscopy of biological macro-molecules.</td>
</tr>
<tr>
<td></td>
<td>- Label free transient absorption, multi photon and second harmonic generation microscopy approaches towards label free investigations.</td>
</tr>
<tr>
<td></td>
<td>- Materials for spintronics, noncollinear magnets, excitations and ultrafast dynamics.</td>
</tr>
<tr>
<td></td>
<td>The research themes for the grant cofunded by the Department of Physics (DIFI) on an ERC programme and by the “Scuola Universitaria Professionale della Svizzera Italiana (SUPSI)” is:</td>
</tr>
<tr>
<td></td>
<td>- Multi-scale modeling approaches to explore the interaction between complex synthetic nano-materials and bio-relevant targets.</td>
</tr>
<tr>
<td>Information on references</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:alessandro.petrolini@ge.infn.it">alessandro.petrolini@ge.infn.it</a>, and to: <a href="mailto:segreteria-didattica@fisica.unige.it">segreteria-didattica@fisica.unige.it</a>.</td>
</tr>
<tr>
<td></td>
<td>The name, status and service place of the referees chosen by the candidates must be stated in their applications.</td>
</tr>
<tr>
<td>Foreign languages</td>
<td>English</td>
</tr>
</tbody>
</table>
Course in: CLINICAL AND EXPERIMENTAL IMMUNOLOGY (CODE 6607)

<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><strong>Places</strong>: 5 – <strong>Grants</strong>: 4 (*)</td>
</tr>
<tr>
<td>(*) 3 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
</tr>
<tr>
<td>(*) 1 grant funded by CEBR, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>6/7/2017 – 9:30 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), first floor (Edificio Clinica Oculistica), secretariat meeting room, viale Benedetto XV 7, Genova.</td>
</tr>
<tr>
<td>Exam Syllabus</td>
<td>- Discussion of the Research Project.</td>
</tr>
<tr>
<td></td>
<td>- Interview on the research themes indicated in the Notice of Public Exam.</td>
</tr>
<tr>
<td></td>
<td>- Reading, translation and comprehension of an English scientific article in English.</td>
</tr>
<tr>
<td>Research themes</td>
<td>Topics concerning Basic and Clinical Immunology.</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: mariacristina.mingari@unige.it and to: 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 |

| Further information | On request, it is possible for foreign candidates to do their interview via Skype. |
| | They must send their request by the 6/6/2017 to the following email addresses: daniela.guelfo@unige.it; mariacristina.mingari@unige.it. |
Course in: COMPUTER SCIENCE AND SYSTEMS ENGINEERING
Doctoral Course in agreement with the Bruno Kessler Foundation (Fondazione Bruno Kessler – FBK)

Curriculum: COMPUTER SCIENCE (CODE 6608)

**Coordinator:** Delzanno Giorgio

Department of Computer Science, Bionengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)

**Places:** 10 – **Grants:** 7 (*)

(*) 6 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

(*) 1 grant funded by MIUR/DIBRIS funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

**Comparative assessment procedure**

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
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</thead>
<tbody>
<tr>
<td>Interview</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 course Web page at the following URL address: [http://phd.dibris.unige.it/csse](http://phd.dibris.unige.it/csse).

**Exam Syllabus**

The comparative assessment procedure consists in the evaluation of qualifications/publications and in an interview on the research themes indicated below and the on the candidate’s research activities of interest.

**Research themes**

The research lines of the Curriculum in Computer Science concern the following areas:
- automated learning;
- embedded systems;
- databases and information technology systems;
- image processing;
- graphics and geometric modelling;
- artificial intelligence;
- software engineering;
- man-machine interaction;
- programming languages;
- theoretical computer science;
- parallel and distributed systems;
- systems and safety;
- computational vision;
- bioinformatics.

More specific research themes are described at the URL: [http://phd.dibris.unige.it/csse](http://phd.dibris.unige.it/csse).

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 stated above.

**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](mailto: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
16146 Genova
(+39) 0103536603
giorgio.delzanno@unige.it

Contact person for the curriculum:
Prof. Francesca Odone
| DIBRIS | (+39) 0103536667 |
|        | francesca.odone@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 6609)**

| **Coordinator:** Delzanno Giorgio  
Department of Computer Science, Bionengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)  
**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 € 13,638.47. |
| **Comparative assessment procedure**  
**Interview**  
3/7/2017 – 9 am at the Department of Computer Science, Bionengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS), via Opera Pia 13, Genova.  
An interview over the phone and via Skype is also possible.  
The date will probably be scheduled on the following days should there be a high number of candidates. |
| **Further information on how to present qualifications/publications**  
Suggestions on how to organize the research projects are available on the Doctoral course Web page at the following URL address: [http://phd.dibris.unige.it/csse](http://phd.dibris.unige.it/csse). |
| **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. |
| **Research themes**  
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 are described on the Web page: [http://phd.dibris.unige.it/csse](http://phd.dibris.unige.it/csse)  
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. |
| **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](mailto:phd.compsci@dibris.unige.it).  
The name, status and service place of the referees chosen by the candidates must be stated in their applications.  
Uno schema di lettera di referenza è disponibile nella pagina web del Dottorato al seguente URL: [http://phd.dibris.unige.it/csse](http://phd.dibris.unige.it/csse) |
| **Foreign languages**  
English |
| **Further information**  
Coordinator of the Doctoral Course:  
Prof. Giorgio Delzanno  
DIBRIS  
via Dodecaneso 35  
16146 Genova  
(+39) 0103536603  
giorgio.delzanno@unige.it  
  
Contact person for the Curriculum:  
Prof. Simona Sacone  
DIBRIS  
via all’Opera Pia 13  
16145 Genova  
(+39) 0103532804  
simona.sacone@unige.it |
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 6610)

**Coordinator:** Delzanno Giorgio

Department of Computer Science, Bionengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)

**Places:** 4 – **Grants:** 4 (*)

(*) 4 grants funded by the Bruno Kessler Foundation (Fondazione Bruno Kessler – FBK), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
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</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
<td>3/7/2017 - alle ore 9:00 Department of Computer Science, Bionengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi - DIBRIS), sede di Valletta Puggia, via Dodecaneso 35, Genova. An interview over the phone and via Skype 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 course Web page at the following URL address: [http://phd.dibris.unige.it/csse](http://phd.dibris.unige.it/csse).

**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.

**Research themes**

The research lines of the Syllabus in Secure and Reliable Systems concern the following areas:
- security testing;
- model-based safety assessment for hybrid systems;
- security testing procedures for mobile applications;
- data protection and privacy: process, technical, and regulatory issues.

More information is available at URL: [http://phd.dibris.unige.it/csse](http://phd.dibris.unige.it/csse).

**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.

A model/template of a reference letter is available on the Doctoral Web page at the following URL address: [http://phd.dibris.unige.it/csse](http://phd.dibris.unige.it/csse).

**Foreign languages**

English

**Further information**

Coordinator of the Doctoral Course:
Prof. Giorgio Delzanno
DIBRIS
via Dodecaneso 35
16146 Genova
(+39) 0103536603
giorgio.delzanno@unige.it

Dott. Mariano Ceccato
FBK
via Sommarive 18
38123 Povo, Trento
(+39) 0461314577
ceccato@fbk.eu
Course in: CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING

Curriculum: FLUID DYNAMICS AND ENVIRONMENTAL ENGINEERING (CODE 6659)

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

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 € 13,638.47.

(*) 1 grant from MIUR/DICCA funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

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<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>5/7/2017 – 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. Should there be a high number of candidates, the interviews will continue on the following day.</td>
</tr>
</tbody>
</table>

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 aim is also to ascertain the candidate has adequate knowledge to profitably deal with the studies in the chosen curriculum. On request, the interview may also be done using computers by contacting the doctoral secretariat (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 the carrying out of the test.

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/ita/fluamb.

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/ita/index.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.

Further information on how to present qualifications/publications
The curriculum must contain a document stating the courses followed and marks obtained during the entire university career of the candidate. 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.

Foreign languages
English

Further information
http://dottorato.dicca.unige.it/ita/index.html
dottorato.dicca@unige.it
Prof. Rodolfo Repetto
rodolfo.repetto@unige.it
Course in: CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING

Curriculum: CHEMICAL ENGINEERING, MATERIALS AND PROCESSES (CODE 6660)

<table>
<thead>
<tr>
<th><strong>Coordinator:</strong></th>
<th>Busca Guido</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale – DICCA)</td>
<td></td>
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<table>
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<tr>
<th><strong>Placements:</strong></th>
<th>3 – Grants: 3 (*)</th>
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<tbody>
<tr>
<td>(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
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</tr>
<tr>
<td>(*) 1 grant from DICCA funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
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</table>

An additional place will be announced within the MCI – Mobility CONFAP Italy-Brazil programme. The application must be presented according to the instructions described at the following website: [http://www.mci.unibo.it/en/brazilian-candidates](http://www.mci.unibo.it/en/brazilian-candidates)

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<tr>
<td><strong>Interview</strong></td>
<td>5/7/2017 – 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. Should there be a high number of candidates, the interviews will continue on the following day.</td>
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</table>

The interview will be a detailed scientific discussion of the candidate’s research project, his/her Curriculum and his/her qualifications/publications, the aim is also to ascertain the candidate has adequate knowledge to profitably deal with the studies in the chosen curriculum. On request, the interview may also be done using computers by contacting the doctoral secretariat (dottorato.dicca@unige.it) and Prof. Attilio Converti converti@unige.it at least 15 days before the evaluation. Candidates must have a reliable internet connection to allow the carrying out of the test.

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

| **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/ita/index.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. |

| **Further information on how to present qualifications/publications** | The curriculum must contain a document stating the courses followed and marks obtained during the entire university career of the candidate. 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. |

| **Foreign languages** | English |

<table>
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<tr>
<th><strong>Further information</strong></th>
<th><a href="http://dottorato.dicca.unige.it/ita/index.html">http://dottorato.dicca.unige.it/ita/index.html</a></th>
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<tr>
<td></td>
<td><a href="mailto:dottorato.dicca@unige.it">dottorato.dicca@unige.it</a></td>
</tr>
<tr>
<td></td>
<td>Prof. Attilio Converti</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:attilio.converti@unige.it">attilio.converti@unige.it</a></td>
</tr>
</tbody>
</table>
Course in: CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING

Curriculum: STRUCTURES, MATERIALS AND GEOTECHNICS (CODE 6661)

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

**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 € 13,638.47

(*) 1 grant from DICCA funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

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<td>5/7/2017 – 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. Should there be a high number of candidates, the interviews will continue on the following day.</td>
</tr>
<tr>
<td><strong>Exam Syllabus</strong></td>
<td>The interview will be a detailed scientific discussion of the candidate’s research project, his/her Curriculum and his/her qualifications/publications, the aim is also to ascertain the candidate has adequate knowledge to profitably deal with the studies in the chosen curriculum. On request, the interview may also be done using computers by contacting the doctoral secretariat (<a href="mailto:dottorato.dicca@unige.it">dottorato.dicca@unige.it</a>) and Prof. Roberta Massabò <a href="mailto:roberta.massabo@unige.it">roberta.massabo@unige.it</a> at least 15 days before the evaluation. Candidates must have a reliable internet connection to allow the carrying out of the test.</td>
</tr>
<tr>
<td><strong>Research themes</strong></td>
<td>The themes dealt with in the curriculum of the “Structures, Materials and Geotechnics” course are described in detail on the course web page: <a href="http://dottorato.dicca.unige.it/ita/stmatgeo">http://dottorato.dicca.unige.it/ita/stmatgeo</a></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. It is preferable for one of the referees to be a member of the curriculum <a href="http://dottorato.dicca.unige.it/ita/index.html">http://dottorato.dicca.unige.it/ita/index.html</a> 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: <a href="mailto:dottorato.dicca@unige.it">dottorato.dicca@unige.it</a>. 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.</td>
</tr>
<tr>
<td><strong>Further information on how to present qualifications/publications</strong></td>
<td>The curriculum must contain a document stating the courses followed and marks obtained during the entire university career of the candidate. 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.</td>
</tr>
<tr>
<td><strong>Foreign languages</strong></td>
<td>English</td>
</tr>
</tbody>
</table>
| **Further information**          | [http://dottorato.dicca.unige.it/ita/index.html](http://dottorato.dicca.unige.it/ita/index.html)  
dottorato.dicca@unige.it  
Prof. Roberta Massabò roberta.massabo@unige.it |
Course in: MACHINE AND SYSTEMS ENGINEERING FOR ENERGY, THE ENVIRONMENT AND TRANSPORT

Curriculum: TRANSPORT AND LOGISTICS SYSTEMS ENGINEERING (CODE 6570)

Coordinator: Cianci Roberto
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 di € 13.638,47

Comparative assessment procedure

QUALIFICATIONS/PUBLICATIONS

Research themes
The “Transport and logistics systems engineering” curriculum presents research themes that deal with:
- the mobility of people on the various territorial scales: estimate and analysis of the demand for transport; analysis, simulation and optimization of the transport offer, of the demand/offer interaction, of the economic, territorial, energetic and environmental impact;
- the planning, management and operation of intermodal transport networks of goods: mathematical models, analysis and optimization of the performance of the road, railway, air and sea transport infrastructures and services, as well as their intermodal interactions;
- evaluation of the effects of interventions in relation to mobility systems projects even integrated, with special reference to the energetic and environmental impact on the territory and therefore to their general sustainability;
- analysis and evaluation of the externalities of transport and logistics systems, with special reference to sustainability, safety and security features and issues, typical of each stage of transport and its interactions with the surrounding environment, even in relation to the different modes of transport and their integration.

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 curriculum at the following address: Prof.Angela Di Febbraro, DIME, via Montallegro 1, 16145 Genova. Or via email to: angela.difebbraro@unige.it.

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

Further information
For further information it is possible to contact the Coordinator of the Doctoral Course Prof. Roberto Cianci, roberto.cianci@unige.it, or Prof. Angela Di Febbraro, angela.difebbraro@unige.it.
Course in: MACHINE AND SYSTEMS ENGINEERING FOR ENERGY, THE ENVIRONMENT AND TRANSPORT

Curriculum: MACHINE AND SYSTEMS ENGINEERING FOR ENERGY, THE ENVIRONMENT AND PROPULSION (CODE 6568)

**Coordinator:** Cianci Roberto

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

**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 € 13,638,47.

(*) 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 € 13,638,47.

**Comparative assessment procedure**

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research themes</strong></td>
</tr>
<tr>
<td>The research themes of the Curriculum concern the production of energy and aircraft propulsion. They are experimental, numeric and theoretical and concern:</td>
</tr>
<tr>
<td>1. Turbo machines and combustors for the generation of energy and aircraft propulsion:</td>
</tr>
<tr>
<td>- flow analysis in plant components and turbo machines;</td>
</tr>
<tr>
<td>- design of tractor and operating turbo machines;</td>
</tr>
<tr>
<td>- unsteady aerodynamics of burners for turbo gas plants;</td>
</tr>
<tr>
<td>- mechanisms generating aerodynamic noise in turbo machines;</td>
</tr>
<tr>
<td>- studio dei processi di combustione study of combustion processes.</td>
</tr>
<tr>
<td>2. Internal combustion engines for automobile traction and marine propulsion:</td>
</tr>
<tr>
<td>- analysis of road vehicle emissions and models of the diffusion of pollutants in the environment;</td>
</tr>
<tr>
<td>- study of the functional characteristics of the components of suction and exhaust systems of engines for self traction;</td>
</tr>
<tr>
<td>- advanced air compressing systems for automobile applications;</td>
</tr>
<tr>
<td>- optimization of performance, consumption and polluting emissions of engines for road traction.</td>
</tr>
<tr>
<td>3. Systems for the generation of energy based on traditional primary and renewable resources:</td>
</tr>
<tr>
<td>- analysis of the static and dynamic behaviour of energy plants;</td>
</tr>
<tr>
<td>- realisation of simulators in simulated and real time;</td>
</tr>
<tr>
<td>- analysis and optimization of complex and innovative plants for the production of energy.</td>
</tr>
</tbody>
</table>

The themes in question present important links with transport systems, with model features linked to mathematical Physics and Numerics, 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. Or via email to: cattanei@unige.it.

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

**Further information**

For further information it is possible to contact the Coordinator of the Doctoral Course Prof. Roberto Cianci: roberto.cianci@unige.it, or Prof. Andrea Cattanei cattanei@unige.it.
Course in: MACHINE AND SYSTEMS ENGINEERING FOR ENERGY, THE ENVIRONMENT AND TRANSPORT

Curriculum: MATHEMATICAL ENGINEERING AND SIMULATION (CODE 6569)

<table>
<thead>
<tr>
<th>Coordinator: Cianci Roberto</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>
</tr>
<tr>
<td>Places: 3 – Grants: 2 (*)</td>
</tr>
<tr>
<td>(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47</td>
</tr>
</tbody>
</table>

**Comparative assessment procedure**

**QUALIFICATIONS/PUBLICATIONS**

**Research themes**

The following research themes are comprised in the curriculum:

1. Continuous and discreet 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 of the Course at the following address: Prof. Andrea Cattanei, DIME, via Montallegro 1, 16145 Genova. Or via email to: roberto.cianci@unige.it.**

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

**Further information**

For further information it is possible to contact the Coordinator of the Doctoral Course Prof. Roberto Cianci: roberto.cianci@unige.it.

**amended on 26/4/2017**
Course in: MECHANICAL, ENERGY AND MANAGEMENT ENGINEERING

Curriculum: ECONOMICS AND MANAGEMENT (CODE 6614)

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 € 13,638.47

Comparative assessment procedure

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
</tr>
<tr>
<td>4/7/2017 – 10 a.m., 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. On request, the interview may also be done using computers (video conference via SKYPE) by getting in touch with the contact person for the EM course Prof. Marco Raberto (<a href="mailto:marco.raberto@unige.it">marco.raberto@unige.it</a>) and copy to the MEME Coordinator Prof. Luca A. Tagliafico (<a href="mailto:tgl@ditec.unige.it">tgl@ditec.unige.it</a>) in advance and specifying the candidate’s name, Skype address and the curriculum he/she is referring to.</td>
</tr>
</tbody>
</table>

Exam Syllabus

The interview will be a discussion of the research project and qualifications/publications presented.

Research themes

The Economics 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.

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 Economics 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.

**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. Luca A. Tagliafico, tgl@ditec.unige.it and to the contact person for the EM Curriculum, Prof. Silvano Cincotti 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 6612)**

| **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 € 13,638.47 |
| **Comparative assessment procedure**  
**QUALIFICATIONS/PUBLICATIONS AND INTERVIEW**  
**Interview**  
4/7/2017 – 10 a.m., 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.  
On request, the interview may also be done using computers (video conference via SKYPE) by contacting the Coordinator of the Doctoral Course Prof. Luca A. Tagliafico (tgl@ditec.unige.it) in advance and specifying the candidate’s name, Skype address and the curriculum he/she is referring to. |
| **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**  
It’s objective is to train young researchers capable of developing theoretical experimental research in the thermodynamic, thermofluid 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:  
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 theatics are developped according to the traditional approach of Environmental Technical Physics.  
2. Energetics and Applied Thermofluid dynamics  
   - Thermodynamic analysis of energy systems  
   - Energy sources, vectors and rational consumption of energy  
   - Environmental impact of energy systems  
   - Single and multiphase thermofluid dynamics. Thermophysical properties of materials.  
   Techniques to increase the efficacy of energy processes and thermofluid dynamic exchange mechanisms.  
   The theatics are developped according to the traditional approach of Industrial Technical Physics.  
3. Nuclear Plants  
The theatics 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. |
| **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 in the actual project. |
| **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, francesco.devia@unige.it and copy to the MEME Coordinator, Prof. Luca A. Tagliafico 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>Foreign languages</th>
<th>English</th>
</tr>
</thead>
</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 |
Course in: MECHANICAL, ENERGY AND MANAGEMENT ENGINEERING

Curriculum: MECHANICS, MEASUREMENTS AND ROBOTICS (CODE 6611)

**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:** 3 (*)

(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

(*) 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 € 13,638.47.

(*) 1 grant funded by DIME on funds deriving from the contribution of the company "Singular Perception srl", the annual, 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>Interview</td>
<td>4/7/2017 – 10 a.m., 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. On request, the interview may also be done using computers (video conference via Skype) by contacting the Coordinator of the Doctoral Course Prof. Luca A. Tagliafico (<a href="mailto:tgl@ditec.unige.it">tgl@ditec.unige.it</a>) in advance and specifying the candidate’s name, Skype address and the curriculum he/she is referring to.</td>
</tr>
</tbody>
</table>

**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 MMR curriculum.

**Research themes**

The Mechanics, Measurements and Robotics (MMR) 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, additive manufacturing (polymer-based metals and composites metalli) (machine and material methods in combination), robot and manipulation, switch systems, home automation (domotics), remote manipulation, modular robots and robots for safety, intelligent mini-vehicles, systems for disassembly, mechanical behaviour of materials, materials and installations for medical, industrial and marine use, calculus modelling and applications of composite components also for orthotics and biomedical applications, environmental compatibility and recycling, pneumatics, oleodynamics, mechanical and mechatronic systems, motor vehicles (cars and motorbikes), railway vehicles, airplanes, mechanical automation, working, raising and transport systems, lubrication, vibrations and noise, sound quality, experimental methods, diagnostics and qualifying of machines and components, monitoring and maintenance, reliability, reverse logistics.

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

The qualifications/publications must contain a detailed explanation and the development plan of a possible research project, quoting the Mechanics, Measurements and Robotics (MMR) 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 in the actual project.

**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. Luca Antonio Tagliafico, tgl@ditec.unige.it and to the contact person for the MMR curriculum, Prof. Matteo Zoppi 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 MMR Curriculum
Prof. Matteo ZOPPI
DIME/Sezione MEC
via all'Opera Pia 15/A
16145 Genova
(+39) 0103532964
matteo.zoppi@unige.it

*grant added with Decree of Director of DIME n. 1912/2017.
## Course in: MECHANICAL, ENERGY AND MANAGEMENT ENGINEERING

**Curriculum: TECHNOLOGIES AND PLANTS (CODE 6613)**

| **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 € 13,638.47.

### Comparative assessment procedure

<table>
<thead>
<tr>
<th>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.</td>
</tr>
<tr>
<td>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:

1. Processing Technologies and Systems Specialization:
   - Analysis of the variables that influence the 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.  

2. Industrial Plants Specialization:
   - Management of production processes.  
   - Lean Manufacturing, Production, Assembly models.  
   - Redesign for process and for cost of production processes.  
   - Life Cycle Assessment of plants and processes.  
   - Engineering and industrialization of new products and production cycles.  

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.

The following laboratories are available for this syllabus:

- laboratory for the micro - macro structural and mechanic characterization of materials;  
- welding laboratory;  
- laboratory for the implementation of glued joints;  
- laboratory to test the environmental ageing of materials;  
- laboratory of tools machinery, laboratory for the characterization of surfaces.

### 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. Luca A. Tagliafico, tgl@ditec.unige.it and to the contact person for the TI curriculum, Prof. Carla Gambaro, 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
tgl@ditec.unige.it

Contact person for the TP Curriculum:
Prof. Carla Gambaro
DIME/Sezione MIG
via all'Opera Pia 15
16145 Genova
(+39) 0103532889
gambaro@diptem.unige.it
Course: JOINT DOCTORATE IN INTERACTIVE AND COGNITIVE ENVIRONMENTS (JD ICE) (CODE 6615)
Doctoral Course in agreement with the Queen Mary University of London

Coordinator: Regazzoni Carlo

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

Places: 4 (*) – Grants: 3 (*).

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

(*) 3 additional places with a grant will be announced by the Queen Mary University of London (QMUL). The Public Notice of Exam will be published at the address www.icephd.org. Thus, there are overall 7 places, 6 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>5/7/2017 – 9:30 a.m. 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, 16145 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; TOEFL min: 220 CBT, 550 PBT, 80 iBT obtained in the last three year starting from the date of application);

e) a signed motivational letter containing a chosen research project and the reasons for the choice (max. 500 words).

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 specific research themes.

During the interview the candidate’s knowledge of English will be tested. In order to be admitted to the interview, the candidate must exhibit the same identity document attached to the application, s/he may also show another valid identity document where s/he can be clearly identified.

Research themes

Main research themes: multimedia signal processing, data fusion, computer vision, cognitive dynamic system and machine learning.

Candidates shall use as reference for the presentation of qualifications/publications and the interview one of the following projects of their choice:

- probabilistic transfer learning among cognitive dynamic systems in smart environments;
- incremental learning techniques for proactive anti-jamming in Cognitive and Software Radio;
- software Defined Network paradigm applied to satellite networks;
- solutions to support Quality of Service through the Software Defined Network paradigm;
- ego things: networks of self aware intelligent objects;
- hardware acceleration systems (e.g., FPGA and ASIC) for neural and machine learning paradigms;
- analog/digital electronic systems for partial discharge measurements in complex electrical machines;
- security schemes for integrated satellite - terrestrial networks;
- modelling and simulation of IOT applications for ambient assisted living;
- graphic simulations for games and learning of soft skills;
- acquisition and interpretation of data for automatic driving;
- acoustic image generation by innovative methodologies, with special emphasis on medical ultrasound;
- data Representation and Analysis from biomedical imaging: canonical models, semantic annotation, and hybrid representations;
signal processing for intelligent sensing over the Internet of Things;
- advance mechanisms for functionalities and services orchestration in Network Function; Virtualisation/Software Define networking environments;
- mechanisms and techniques for energy consumption reduction in the future Internet and 5G networks;
- development and experimental validation of novel signal processing and pattern recognition methodologies for information extraction from image, signal, and measurement data;
- “inverse scattering” methods for “through-the-wall imaging” applications;
- methods and Algorithms for Text Mining, Semantic Analysis in Business and Security 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: carlo.regazzoni@unige.it or to icephd@dibe.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**

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” approved with an Urgent Decree of the DITEN Department of the University of Genova, on 14.02.2017 and by the C.D.A. on 22.03.2017, by the two Universities Partners in the Project: the University of Genova (UNIGE) and the Queen Mary University of London (QMUL). It envisages a joint model of coordination of the doctorate, of supervision and mobility of the candidates. 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.

For further information: http://www.icephd.org.
Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES

Curriculum: CLASSICAL PHILOLOGY (CODE 6620)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Verdino Stefano Fernando</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Italian and Romance languages, Classical Studies, Arts and Performing Arts (Dipartimento di Italianistica, romanistica, antichistica, arti e spettacolo – DIRAAS)</td>
<td></td>
</tr>
<tr>
<td>Places</td>
<td>8 – Grants: 6 (*)</td>
</tr>
<tr>
<td>(*): 6 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47</td>
<td></td>
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<td>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.</td>
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<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
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<tbody>
<tr>
<td>Written test</td>
<td>10/7/2017 – 10 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), Library, Via Balbi, 4, 16126 Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>13/7/2017 – 10 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), Via Balbi, 4, 16126 Genova.</td>
</tr>
<tr>
<td>Further information on how to present qualifications/publications</td>
<td>The 5-year degree dissertation (even if it has not yet been discussed) and any other publications in PDF format shall be sent to Prof. Lara Nicolini: <a href="mailto:lara.nicolini@unige.it">lara.nicolini@unige.it</a>.</td>
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<thead>
<tr>
<th>Exam Syllabus</th>
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<tbody>
<tr>
<td>The written test will consist in a translation from Latin or Greek (the candidate may choose) with a philological and exegetical commentary.</td>
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<tr>
<td>The oral test will be a talk during which the candidate will present his/her research project and a discussion of the written test.</td>
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<tr>
<td>Candidates must attach their research project to their applications.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
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<tr>
<th>Research themes</th>
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<tbody>
<tr>
<td>- Philology and Greek Literature;</td>
<td></td>
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<tr>
<td>- Philology and Latin Literature;</td>
<td></td>
</tr>
<tr>
<td>- Philology and Byzantine Literature;</td>
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<tr>
<td>- Tradition and fortune of the ancient christian text.</td>
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<th>Information on references</th>
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<tbody>
<tr>
<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 following email address: <a href="mailto:valentina.pomata@unige.it">valentina.pomata@unige.it</a>.</td>
<td></td>
</tr>
<tr>
<td>The name, status and service place of the referees chosen by the candidates must be stated in their applications.</td>
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<tr>
<th>Foreign languages</th>
<th>English or French or Spanish or German</th>
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<tbody>
<tr>
<td>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.</td>
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<tr>
<th>Further information</th>
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<tbody>
<tr>
<td>Candidates are advised to check the classificational list of those admitted before coming to the written test. It will take into account curriculum studiorum, qualification, publications, the thesis of the five-year degree and the research project.</td>
<td></td>
</tr>
<tr>
<td>The classificational list of those admitted to the written test will be published on the DIRAAS website by the 5/7/2017.</td>
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</table>

Further information on how to present qualifications/publications
Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES

Curriculum: PHILOLOGY AND LINGUISTICS OF ITALIAN AND ROMANCE TEXTS (CODE 6617)

| **Coordinator:** Verdino Stefano Fernando |
| Department of Italian and Romance languages, Classical Studies, Arts and Performing Arts (Dipartimento di Italianistica, romanistica, antichistica, arti e spettacolo – DIRAAS) |

| **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 € 13,638.47. |
| 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. |

| **Comparative assessment procedure** | QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS |
| Written test | 10/7/2017 – 10 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), Library, via Balbi 4, Genova. |
| Interview | 13/07/2017 – 10 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), via Balbi 4, Genova. |

| **Further information on how to present qualifications/pubblications** | The 5-year degree dissertation (even if it has not yet been discussed) and any other publications in PDF format shall be sent to prof. Enrico Testa: enrico.testa@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: valentina.pomata@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, qualification, 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 DIRAAS website by the 5/7/2017. |
Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES
Curriculum: ITALIAN LITERATURE: TEXTUAL TRADITIONS AND INTERPRETATIONS (CODE 6616)

Coordinator: Verdino Stefano Fernando
Department of Italian and Romance languages, Classical Studies, Arts and Performing Arts (Dipartimento di Italianistica, romanistica, antichistica, arti e spettacolo – DIRAAS)

** 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 € 13,638.47.

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.

### Second instalment

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<td><strong>Written test</strong></td>
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<tr>
<td><strong>Interview</strong></td>
<td>13/7/2017 – 10 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), via Balbi 4, Genova.</td>
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</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 in PDF format shall be sent to Prof. Luca Beltrami: luca.beltrami@unige.it.

**Exam Syllabus**

- Written test: Historical and literary comment and illustration of a text in verse or prose; i.e.:
  - Discussion of a theoretical or critical text 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 translation of a passage from English or French will also be requested during the interview.

  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.
- Italian literature from Manierism to the Twentieth Century.
  a) Ligurian workshop from the Sixteenth to the Twentieth Century
  b) Authors from Mannerism to Romanticism
  c) The Risorgimento.
- Authorial Documents in Liguria.
- Literature and Journalism.

**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: valentina.pomata@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.

**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, qualification, 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 DIRAAS website by the 5/7/2017.

** amended on 26/4/2017**
Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES

Curriculum: ANGLO-GERMAN LITERATURES (CODE 6618)

**Coordinator:** Verdino Stefano Fernando

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

**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 € 13,638.47.

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.

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<tr>
<td>Interview</td>
<td>13/7/2017 – 10 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), via Balbi 4, Genova.</td>
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</tbody>
</table>

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

The 5-year degree dissertation (even if it has not yet been discussed) and any other publications in PDF format shall be sent to Prof. Stefania Michelucci: stefania.michelucci@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). 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:**
  Elizabathan and Jacobean theatre; Genesis and development of the novel; forms of “scriblerian” writing from Swift to Sterne; orientalism in the age of Enlightenment; Sublime aesthetics and poetics; female writers and the literature market; 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; urban literature (20th-21st); tradition and innovation in the poetry of the second Post War period; metaphysical poetry and modernist criticism.

- **German Studies:**
  Horror literature; the historical novel; war novels and war poetry; entertainment literature and construction of national identities (1850-1914), contemporary dramaturgy (20th and 21st centuries), transcultural literature in German.

- **Nordic Literatures**
  Society and modernity between the 19th and early 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.
<table>
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<tr>
<th>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.</th>
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<td>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.</td>
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<td>Candidates are advised to check the classificational list of those admitted before coming to the written test. It will take into account curriculum studiorum, qualification, publications, the thesis of the five-year degree and the research project.</td>
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Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES

Curriculum: ROMANCE AND SLAVIC LITERATURES (CODE 6619)

<table>
<thead>
<tr>
<th>Coordinator: Verdino Stefano Fernando</th>
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<tbody>
<tr>
<td>Department of Italian and Romance languages, Classical Studies, Arts and Perfoming Arts (Dipartimento di Italianistica, romanistica, antichistica, arti e spettacolo – DIRAAS)</td>
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<td>Placements: 8 – Grants: 6 (*)</td>
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<td>10/7/2017 – 10 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), Library, via Balbi 4, Genova.</td>
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<tr>
<td>Interview</td>
<td>13/7/2017 – 10 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), via Balbi 4, Genova.</td>
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</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 in PDF format shall be sent to Prof. Ida Merello: ida.merello@unige.it |

<table>
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<tr>
<th>Exam Syllabus</th>
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<tbody>
<tr>
<td>Written test:</td>
<td>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.</td>
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<td>Oral test:</td>
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<tr>
<th>Research themes</th>
<th>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 – 20th centuries) and Russian (18th – 21st centuries) literature authors and texts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fields of particular interest:</td>
<td>French Studies: Detailed study of single authors, currents and trends from the 17th century to the present day; theoretical and poetic features of the petites revues from the end of the 19th century.</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Spanish literature: 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.</td>
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<tr>
<td>Latin American literatures:</td>
<td>60</td>
</tr>
<tr>
<td>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>
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<tr>
<td>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, autobiographies. Jewish Studies within the Polish and Ashkenazic ambit, and also Jewish-Polish and Jewish-Italian literature; imagology and forms of self-representation.</td>
<td></td>
</tr>
<tr>
<td>Russian Studies: Humour studies; onomastics; literature and geography: space, travel, identity; female literature; literature and emotions.</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 email address: valentina.pomata@unige.it.

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

**Foreign languages**

At least two languages among: French, English, Polish, Portuguese, Russian, Spanish, Swedish, Danish, Norwegian, German.

**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, qualification, 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 DIRAAS website by the 5/7/2017.
Course in: MODERN AND CLASSICAL LITERATURES AND CULTURES

Curriculum: HISTORICAL SCIENCES OF ANCIENT TIMES (CODE 6621)

| **Coordinator:** Verdino Stefano Fernando  
Department of Italian and Romance languages, Classical Studies, Arts and Perfoming Arts (Dipartimento di Italianistica, romanistica, antichistica, arti e spettacolo – DIRAAS) |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Places:</strong> 8 – <strong>Grants:</strong> 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 € 13,638.47.

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><strong>Comparative assessment procedure</strong></th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Written test</strong></td>
<td>10/7/2017 – 10 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), Library, via Balbi 4, Genova.</td>
</tr>
<tr>
<td><strong>Interview</strong></td>
<td>13/7/2017 – 10 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), via Balbi 4, Genova.</td>
</tr>
</tbody>
</table>

Further information on how to present qualifications/pubblications

The 5-year degree dissertation (even if it has not yet been discussed) and any other publications in PDF format shall be sent to Prof. Nicola Cucuzza: nicola.cucuzza@lettere.unige.it.

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 a talk in which candidates will present their research projects and discuss their written tests. Knowledge of two foreign languages will also be tested.

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: valentina.pomata@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, qualification, 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 DIRAAS website by the 5/7/2017.
Course in: MATHEMATICS AND APPLICATIONS

Curriculum: MATHEMATICS AND APPLICATIONS (CODE 6622)

**Coordinator:** Pinamont Nicola  
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 € 13,638.47.

(*) 1 grant from MIUR/DIMA funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

2 additional places will be announced within the following programme of international mobility: Programme/Call: H2020- MSCA-COFUND-2015/H2020- MSCA-COFUND-2015 Proposal: 713485 - INdAM-DP-COFUND-2015. The application must be presented according to the instructions described at the following website: https://cofund.altamatematica.it/dp-2015/main/website?page=doctoral-programmes

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
</table>
| **Date, time and venue of the interview:** | 6/7/2017 – 9 am at the University of Genova, Department of Mathematics (Dipartimento di Matematica – DIMA), via Dodecaneso 35, 16146 Genova.  
The interviews may continue on 7 of July.  
Candidates who are interested may request the interview to be done also using computers (via Skype) by contacting Prof. Nicola Pinamonti (pinamont@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/pubblications | 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 | - Harmonic and functional analysis.  
- Mathematical logic and theory of categories.  
- Commutative algebra and computer algebra.  
- Complex projective geometry.  
- Analytic theory of numbers.  
- Arithmetic geometry and algebraic theory of numbers.  
- Geometric methods in physics theories.  
- Mathematical aspects of quantum mechanics and theory of field on curved space.  
- Mathematical probability and statistics.  
- Numeric analysis and computational methods with applications in medical imaging, neurosciences and astrophysics. |

| 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. Nicola Pinamonti  
Università di Genova  
Department of Mathematics (Dipartimento di Matematica - DIMA)  
via Dodecaneso 35  
16146 Genova  
or, alternatively, to the email address: pinamont@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. Nicola Pinamonti  
Dipartimento di Matematica  
via Dodecaneso 35  
16146 Genova  
pinamont@dima.unige.it |
Course in: MATHEMATICS AND APPLICATIONS

Curriculum: MATHEMATICAL METHODS FOR DATA ANALYSIS (CODE 6623)

| **Coordinator:** | Pinamonti Nicola |
| **Department of Mathematics (Dipartimento di Matematica – DIMA)** |
| **Places:** | 4 – Grants: 4 (*) |

(*) 2 grants funded by Costa Crociere Spa following the drawing up of a specific agreement to carry out research within the project “Mathematical Models for the optimization of selling processes in the maritime sphere”, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

(*) 2 grants funded by SwissRe International SE following the drawing up of a specific agreement to carry out research within the project “Mathematical and Statistical Models for risk assessment”, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

| **Comparative assessment procedure** | QUALIFICATIONS/PUBLICATIONS AND INTERVIEW |
| **Date, time and venue of the interview:** | 6/7/2017 – 9 am at the University of Genova, Department of Mathematics (Dipartimento di Matematica – DIMA), via Dodecaneso 35, 16146 Genova. The interviews may continue on 7 of July. Candidates who are interested may request the interview to be done also using computers (via Skype) by contacting Prof. Nicola Pinamonti (pinamont@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**
The research theme for the two grants funded by Costa Crociere S.p.A. is:
- “Development of mathematical models for the optimization of selling processes and the maximization of revenue in retail”, (data mining and machine learning techniques for the modelling of behaviours and purchasing flows based on the buyer’s features will be studied).

The research theme for the two grants funded by SwissRe International S.E. is:
- “Development of mathematical and statistical models for risk assessment” (the combination of statistical models and the identification of efficient sub-samples in large datasets will be studied).

**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. Nicola Pinamonti
Università di Genova
Dipartimento di Matematica
via Dodecaneso 35
16146 Genova

or, alternatively, to the email address: pinamont@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. Nicola Pinamonti
Dipartimento di Matematica
via Dodecaneso 35
16146 Genova
pinamont@dima.unige.it
Course in: EXPERIMENTAL MEDICINE

Curriculum: BIOCHEMISTRY (CODE 6624)

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

**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 € 13,638.47

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

| Interview                        | 3/7/2017 – 3 pm at the Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES), Biochemistry section, viale Benedetto XV 1, Genova. |

| 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                  | Studies of molecular mechanisms for the regulation of cellular activity by protein mediators and not only, of natural origin. Molecular biology of Development and Neurogenesis in different model organisms. |

| 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. Franca Salamino  
DIMES sez. Biochimica  
viale Benedetto XV 1  
16132 Genova  
(+39) 0103538160  
or, alternatively, to the email address: salamino@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. Franca Salamino  
DIMES, sezione Biochimica  
viale Benedetto XV 1  
16132 Genova  
(+39) 0103538160  
salamino@unige.it |

* New coordinator elected on May 11, 2017
# Course in: EXPERIMENTAL MEDICINE

## Curriculum: PHARMACOLOGY AND TOXICOLOGY (CODE 6625)

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

<table>
<thead>
<tr>
<th><strong>Places:</strong> 2 – <strong>Grants:</strong> 2 (*).</th>
</tr>
</thead>
<tbody>
<tr>
<td>(*): 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
</tr>
</tbody>
</table>

### Comparative assessment procedure

<table>
<thead>
<tr>
<th><strong>Interview</strong></th>
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</thead>
<tbody>
<tr>
<td>5/7/2017 – 2.30 pm at the Department of Pharmacy (Dipartimento di Farmacia – DIFAR), Pharmacology and Toxicology Section, viale Cembrano 4, 16148 Genova.</td>
</tr>
</tbody>
</table>

### 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, Clinical Pharmacology and Genotoxicity.

### 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

* New coordinator elected on May 11, 2017
Course in: EXPERIMENTAL MEDICINE

Curriculum: INTERNATIONAL CURRICULUM IN PHARMACOLOGY AND TOXICOLOGY (CODE 6627)
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 € 13,638.47.

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 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>
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</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
<td>5/7/2017 – 9 am at the Department of Pharmacy (Dipartimento di Farmacia – DIFAR), viale Cembrano 4, 16148 Genova.</td>
</tr>
<tr>
<td><strong>Exam Syllabus</strong></td>
<td>The admission test will concern topics in General and Clinical Pharmacology and Toxicology, and a brief description of previous research experiences. Knowledge of English will be tested with the reading and translation of a scientific paper.</td>
</tr>
<tr>
<td><strong>Research themes</strong></td>
<td>Neuropharmacology, neurotoxicology, clinical pharmacology and genotoxicology.</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. 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

* New coordinator elected on May 11, 2017
Course in: EXPERIMENTAL MEDICINE

Curriculum: MOLECULAR AND CELLULAR PATHOLOGIES OF DISEASES CORRELATED TO AGEING (CODE 6626)

| Coordinator: Giambattista Bonanno * | Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES) |
| 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 € 13,638.47.

| Comparative assessment procedure | QUALIFICATIONS/PUBLICATIONS AND INTERVIEW |
| Interview | 6/7/2017 – 10 am at the Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES), Pathology Section, via L.B. Alberti 2, 16132 Genova. |

| Exam Syllabus | Interdisciplinary, experimental, clinical methodologies and pharmaceutical and therapeutic themes concerning the pathology of ageing and age-related and age-dependent diseases. |
| Research themes | Ageing theories: |
| | - Molecular and cellular alterations in ageing; |
| | - Ageing mechanisms of the sense organs; |
| | - Molecular bases of neoplasias. |

| 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 |
| | (+39) 0103538830 |
| | 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 |

* New coordinator elected on May 11, 2017
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 6628)

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

PlACES: 5 – Grants: 3 (*)

(*) 3 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47

Comparative assessment procedure

QUALIFICATIONS/PUBLICATIONS E INTERVIEW

Interview
6/7/2017 – 9 am at the Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI), DINOGMI Aula (room)**, largo Paolo Daneo 3, 16132 Genova.

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 and non-conventional MR on neurologic and psychiatric diseases.
f) Cellular and molecular neurophysiopathology: 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.

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. Antonio Uccelli
Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOGMI)
Largo Paolo Daneo 3
16132 Genova

or, alternatively, to the email address: neuroimmuno3@neurologia.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. Antonio Uccelli
Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOGMI)
Largo Paolo Daneo 3
16132 Genova
(+39) 0103537030-7040
neuroimmuno3@neurologia.unige.it

Dott.ssa Maria Paola Fenu
neurologia@neurologia.unige.it

** amended on 20/4/2017
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 6629)**

| **Coordinator:** | Abbruzzese Giovanni |
| **Department:** | Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI) |
| **Places:** | 10 – Grants 10 (*) |

(*) 10 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** | 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** | The titles of the research themes are listed below; the complete description of the research themes can be consulted at [https://www.iit.it/phd-school](https://www.iit.it/phd-school):  
  1) Role of receptor diffusion in short-term inhibitory postsynaptic plasticity. Tutor: Andrea Barberis andrea.barberis@iit.it  
  2) Physiological characterization of epileptogenic mutants of the mTOR pathway. Tutor: Fabio Benfenati fabio.benfenati@iit.it  
  3) Early cellular and network dysfunctions induced by disease-relevant neurotoxicity. Tutor: Luca Berdondini luca.berdondini@iit.it  
  4) 5) Cellular determinants of brain circuit development and wiring in health and disease. Two positions are available. Tutor: Laura Cancedda laura.cancedda@iit.it  
  6) Molecular mechanism of gliogenesis and relevance for glioblastoma in the postnatal mammalian brain. Tutor: Davide De Pietri Tonelli davide.depietri@iit.it  
  7) Cellular mechanisms of perception. Tutor: Tommaso Fellin Tommaso.felin@iit.it  
  8) Genetics determinant of cognitive/social brain circuits. Tutor: Francesco Papaleo francesco.papaleo@iit.it  
  9) Noradrenergic modulation in action control. Tutor: Raffaella Tonini raffaella.tonini@iit.it  
  10) Elucidation of microRNA role during emergence of T-cell exhaustion. Tutor: Velia Siciliano nbtphdcourse@iit.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 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. |

| **Further information** | For further information write to: nbtphdcourse@iit.it |
**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 6630)**

<table>
<thead>
<tr>
<th><strong>Coordinator:</strong></th>
<th>Abbruzzese Giovanni</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Department:</strong></td>
<td>Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI)</td>
</tr>
<tr>
<td><strong>Places:</strong></td>
<td>7 – <strong>Grants:</strong> 5 (*)</td>
</tr>
<tr>
<td><strong>(*):</strong></td>
<td>2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13.638.47.</td>
</tr>
<tr>
<td><strong>(*):</strong></td>
<td>1 grant from MIUR/DINOGMI funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13.638.47.</td>
</tr>
<tr>
<td><strong>(*):</strong></td>
<td>2 grants from University/DINOGMI funds, in the context of the international collaboration with Vrije Universiteit Brussel, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13.638.47.</td>
</tr>
<tr>
<td><strong>Comparative assessment procedure</strong></td>
<td>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</td>
</tr>
<tr>
<td><strong>Interview</strong></td>
<td>4/7/2017 – 10 am at the Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili – DINOGMI), Library, largo Paolo Daneo 3, 16132 Genova</td>
</tr>
</tbody>
</table>
| **Further information on how to present qualifications/pubblications** | 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:  
- Motory performance, motory learning and sensorimotor integration (the kinematics of movement, postural analysis, electrophysiology of movement and of sensorimotor integration, morphologic and functional imaging).  
- 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).  
As regards the grants in collaboration with Vrije Universiteit Brussel (a period at VUB for not less than 6 months) the following research lines will be developed:  
- Body perception and pain modulation in the presence of musculoskeletal disorders.  
- Kinematic control and control of the distribution of strength while carrying out functional gestures in individuals affected by musculoskeletal pain. |
| **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. Giovanni Abbruzzese  
Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOGMI)  
largo Paolo Daneo 3  
16132 Genova  
(+39) 0103537039  
Or, alternatively, to the email address: gabbruzzese@neurologia.unige.it, or to Dott. Maria Paola Fenu at the following email address: 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. Giovanni Abbruzzese  
Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOGMI) |
<table>
<thead>
<tr>
<th>largo Paolo Daneo 3</th>
<th>tel. (+39) 0103537039</th>
</tr>
</thead>
<tbody>
<tr>
<td>16132 Genova</td>
<td><a href="mailto:gabbruzzese@neurologia.unige.it">gabbruzzese@neurologia.unige.it</a></td>
</tr>
</tbody>
</table>
### Course in: HEALTH SCIENCES

#### Curriculum: BIOSTATISTICS (CODE 6640)

**Coordinator:** Viscoli Claudio  
Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL)

**Places:** 1  
**Grants:** 1 (*).

(*) 1 grant from MIUR/DISSAL funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

<table>
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<tr>
<td>Written test</td>
<td>6/7/2017 – 9 am at the Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL), Room A, via Pastore 1, 16132 Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>6/7/2017 – 11 am at the Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL), Room A, via Pastore 1, 16132 Genova.</td>
</tr>
<tr>
<td>Further information on how to present qualifications/publications</td>
<td>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.</td>
</tr>
<tr>
<td>Exam Syllabus</td>
<td>The tests will concern topics relating to the research themes.</td>
</tr>
</tbody>
</table>

#### 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.

#### 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: Giuseppe Zara  
giuseppe.zara@unige.it
Course in: HEALTH SCIENCES

Curriculum: EPIDEMIOLOGY AND VACCINE PREVENTION (CODE 6636)

| **Coordinator:** Viscoli Claudio  
Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL)  
| **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 € 13.638,47. |

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**Further information on how to present qualifications/pubblications**  
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** | Le prove verteranno su argomenti inerenti ai temi di ricerca. |

<table>
<thead>
<tr>
<th><strong>Research themes</strong></th>
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</thead>
</table>
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:  
Giuseppe Zara  
giuseppe.zara@unige.it
Course in: HEALTH SCIENCES

Curriculum: INFECTION AND TROPICAL DISEASES (CODE 6635)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Viscoli Claudio</th>
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<tr>
<td>Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL)</td>
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<tr>
<td>Places: 2 – Grants: 1 (*)</td>
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| Further information on how to present qualifications/pubblications | 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. Claudio Viscoli at the following address: claudio.viscoli@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>Contact person in administration:</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Mr Giuseppe Zara</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:giuseppe.zara@unige.it">giuseppe.zara@unige.it</a></td>
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</table>
Course in: HEALTH SCIENCES

Curriculum: FORENSIC AND OCCUPATIONAL MEDICINE (CODE 6639)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Viscoli Claudio</th>
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<tbody>
<tr>
<td>Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL)</td>
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</tr>
<tr>
<td>Places: 2 – Grants: 1 (*)</td>
<td>(*) 1 grant from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13.638,47.</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.

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<th>Exam Syllabus</th>
<th>The tests will concern topics relating to the research themes.</th>
</tr>
</thead>
</table>

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 multidisciplinary consolidated protocols.
4) Examination and assessment of the victim of abuse in family with special reference to abuse of the elderly, women and children. 5) Identificazione individuale su vivente, cadavere e tracce biologiche, tramite studio del 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 immunophylaxis.
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 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 6638)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Viscoli Claudio</th>
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<tbody>
<tr>
<td>Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL)</td>
<td></td>
</tr>
<tr>
<td>Places: 1 – Grants: 1 (*)</td>
<td></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 € 13,638,47.</td>
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</tr>
<tr>
<td>Exam Syllabus</td>
<td>The tests will concern topics relating to the research themes.</td>
</tr>
</tbody>
</table>

**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. Loredana Sasso at the following address: l.sasso@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 6637)

<table>
<thead>
<tr>
<th><strong>Coordinator</strong></th>
<th>Viscoli Claudio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Department of Health Sciences (Dipartimento di Scienze della Salute – DISSAL)</strong></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 € 13,638.47.

### Comparative assessment procedure

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<td>6/7/2017 – 11 am at the Department of Health Sciences (Dipartimento di Scienze della Salute - DISSAL), Room A, via Pastore 1, 16132 Genova.</td>
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</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: SCIENCE AND TECHNOLOGY OF CHEMISTRY AND MATERIALS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia - ITT)

Curriculum: DRUG DISCOVERY AND NANOBIOTECHNOLOGIES (CODE 6645)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Saccone Adriana</th>
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<tbody>
<tr>
<td>Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI)</td>
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<td>Places: 4 – Grants: 4 (*).</td>
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(*) 4 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.

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<tr>
<td>Further information on how to present qualifications/publications</td>
<td>Assessable qualifications/publications:</td>
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<tr>
<td></td>
<td>1. academic qualifications and relative marks;</td>
</tr>
<tr>
<td></td>
<td>2. list of exams sat during university studies with relative marks;</td>
</tr>
<tr>
<td></td>
<td>3. reference letters (not more than three);</td>
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<td></td>
<td>4. research project written in English;</td>
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<td></td>
<td>5. curriculum;</td>
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<tr>
<td></td>
<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 in copies true to the original.
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. Proteomics and metabolomics to investigate changes in biological pathways. |
|-----------------| 2. Immunomodulatory effects of nanomaterials. |
|                 | 3. Exploring nano-bio interactions for the development of new drug delivery systems. |
|                 | 4. Development of colorimetric nanosensors for POC and on-field diagnostics. |

| 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 |
|---------------------| (+39) 01071781533 |
|                     | tiziano.bandiera@iit.it |

Contact person in administration
Dott.ssa Cecilia Cattaneo
(+39) 01071781442
cecilia.cattaneo@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: NANOCHEMISTRY (CODE 6644)

<table>
<thead>
<tr>
<th><strong>Coordinator:</strong></th>
<th>Saccone Adriana</th>
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<tbody>
<tr>
<td>Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI)</td>
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<tr>
<td><strong>Places:</strong></td>
<td>10 – <strong>Grants:</strong> 10 (*)</td>
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<tr>
<td>(*) 10 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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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 in copies true to the original.
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.

<table>
<thead>
<tr>
<th><strong>Research themes</strong></th>
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<tbody>
<tr>
<td>1. Development of novel plasmonics nanomaterials.</td>
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<tr>
<td>2. Development of new materials for energy conversion.</td>
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<tr>
<td>3. Development of new materials for photonic and optoelectronic applications.</td>
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<tr>
<td>4. Development and analysis of composite nanomaterials for sensors and actuators.</td>
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<tr>
<td>5. Manipulating light emission with metamaterials.</td>
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<tr>
<td>7. Synthesis and in vitro characterization of drug delivery systems based on inorganic nanoparticles.</td>
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<tr>
<td>8. Production of graphene and 2D crystal-based inks and electrodes for energy storage applications.</td>
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</tr>
<tr>
<td>9. Novel polymeric composites based on two-dimensional crystals as fillers with different aspect ratio.</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, 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. |

<table>
<thead>
<tr>
<th><strong>Further information</strong></th>
<th>Contact person in administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dott. Iulia Manolache</td>
<td>Tel: (+39) 01071781718</td>
</tr>
<tr>
<td><a href="mailto:iulia.manolache@iit.it">iulia.manolache@iit.it</a></td>
<td></td>
</tr>
</tbody>
</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: SCIENCE AND TECHNOLOGY OF MATERIALS (CODE 6642)

Coordinator: Saccone Adriana
Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI)

**Places:** 6 – **Grants:** 4 (*).

(*) 3 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

(*) 1 grant funded by the Department of Physics (Dipartimento di Fisica – DIFI) based on the European project ERC-BIONMP (starting grant 677513), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview</strong></td>
<td>6/7/2017 – 9 am at the Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI), via Dodecaneso 31, 16146 Genova. Candidates who live more than 300 km away from Genoa may use the video-conference modality. Candidates must show an original document of identity, a copy of which will have been submitted with the online application for identification purposes. The motivated request for video-conference modality must be sent within and not beyond 15 June 2017 by email to the address: <a href="mailto:putti@fisica.unige.it">putti@fisica.unige.it</a>.</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. research project written in English;
5. curriculum;
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 in copies true to the original. 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 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.

**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, 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.).

**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: putti@fisica.unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
<table>
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<tr>
<th>Foreign languages</th>
<th>English</th>
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<tbody>
<tr>
<td><strong>Further information</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Prof. Marina Putti | (+39) 0103536383  
putti@fisica.unige.it |

Contact person in administration  
Mrs Noemi Pretelli  
(+39) 0103536161/8752  
noemi@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 6641)

<table>
<thead>
<tr>
<th>Coordinator: Saccone Adriana</th>
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<tbody>
<tr>
<td>Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI)</td>
</tr>
</tbody>
</table>

**Places:** 8  
**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 € 13,638.47.

(*) 1 grant co-funded by MIUR/Ansaldo Energia, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

**Comparative assessment procedure**

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<tr>
<td>5/7/2017 – 9 am at the Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI), via Dodecaneso 31, 16146 Genova.</td>
</tr>
<tr>
<td>Candidates who live more than 300 km away from Genoa may use the video-conference modality.</td>
</tr>
<tr>
<td>Candidates must show an original document of identity, a copy of which will have been submitted with the online application for identification purposes.</td>
</tr>
<tr>
<td>The motivated request for video-conference modality must be sent within and not beyond 28/6/2017 to the following email address: <a href="mailto:adriana.saccone@unige.it">adriana.saccone@unige.it</a>.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Qualifications/publications:</th>
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<tbody>
<tr>
<td>1. academic qualifications and relative marks;</td>
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<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. research project written in English;</td>
</tr>
<tr>
<td>5. curriculum;</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 in copies true to the original.

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 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.

**Research themes**

| 1. Chemistry and Physical Chemistry of photoactive materials. |
| 2. Nanoparticles for technological applications. |
| 3. Synthesis and study of crystal-chemical, thermal properties, magnetic and transport of oxides, nitrides and carbides. |
| 4. Determination of chemical species of environmental and oceanographic interest. |
| 5. Development of chromatographic innovative methodologies coupled with mass spectrometry. |
| 6. Analytic chemistry of trace elements. |
| 7. Chemistry of the polar environments. |
| 8. Chemical, enzymatic and organocatalytic synthesis of biologically active compounds. |
| 11. Intermetallic compounds: synthesis, structure, properties and technological applications. |
| 13. Inorganic materials (metallic and refractory) for renewable energy. |
| 15. Polymeric nanostructures for photonics. |
| 16. Membranes and membrane processes |
| 17. Chemistry for the study and preservation of the cultural heritage |
| **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: adriana.saccone@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. Adriana Saccone  
(+39) 0103536154  
adriana.saccone@unige.it  |
|  | Prof. Renata Riva  
(+39) 0103536106  
renata.riva@unige.it  |
|  | Contact person in administration  
Mrs Noemi Pretelli  
(+39) 0103536161/8752  
noemi@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: PHARMACEUTICAL, NUTRITIONAL AND COSMETIC SCIENCES (CODE 6643)

| Coordinator: Saccone Adriana  
Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI)  
Places: 6 – Grants: 4 (*).  
(*) 4 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,368.47.  
Comparative assessment procedure | QUALIFICATIONS/PUBLICATIONS AND INTERVIEW  
---|---  
Interview | 4/7/2017 – 9:30 am at the Department of Pharmacy (Dipartimento di Farmacia – DIFAR, former venue of DISCIFAR), viale Benedetto XV 3, 16132 Genova.  
Candidates who live more than 300 km away from Genoa may use the video-conference modality.  
Candidates must show an original document of identity, a copy of which will have been submitted with the application for identification purposes.  
The motivated request for video-conference modality must be sent within and not beyond 20 June 2017 by email to the following address fossa@difar.unige.it.  
Further information on how to present qualifications/publications | Besides the usual qualifications/publications, the following are also required:  
1. A Curriculum vitae et studiorum duly signed. It must comprise information on the name/type and mark of the degree or an equivalent qualification (except for final year students who have enrolled conditionally), the title and a brief description of the thesis (where requested), as well as a list of exams and relative marks. The CV may be written in Italian or in English.  
2. A signed research project concerning the research theme of the doctoral course object of the application (a maximum of ten pages, written in Italian or English).  
3. Any other qualifications/publications, certifications, deemed useful for admission (optional).  
Exam Syllabus | Basic knowledge of Pharmaceutical and Toxicological Chemistry, Pharmaceutical Technology, Chemiometry, Organic and Macromolecular Chemistry, Phytochemistry, the Chemistry of Cosmetic Products, Foods Chemistry and Chemistry of Diet Products. Discussion of the degree dissertation and the research themes proposed.  
Research themes | 1. Study of active principles of natural origin and their structural modifications.  
2. Design, synthesis and evaluation of the biologic activity of compounds of potential therapeutic interest such as antineoplastic and antiviral drugs.  
3. Design, synthesis and evaluation of the biological activity of compounds with potential action on the cardiovascular system.  
4. Rational design and synthesis of new compounds with anti-infective activities, with special reference to anti-tuberculosis activity.  
5. Advanced computational methodological applications for the study of the ligando-receptor and ligando-enzyme interaction at molecular level.  
6. Study and application of modern procedures with a low environmental impact to obtain nutritional bioactive compounds. Enhancement and characterization of food products and development of food suplements and innovative functional foods.  
7. Design and execution of synthetic methodologies of biodegradable and non cytotoxic polyester dendrimers, functionalized amphiphilic drugs either with aminoacid mixtures including L-arginine for applications in gene therapy or with natural acids pharmacologically active for drug-delivery.  
8. Design and development of nanodispersion and microdispersion systems or with bioadhesive matrix, for drug delivery and drug targeting.  
10. Research on biologically active phytoconstituents.  
11. Study of biogeochemical cycles of trace elements: presence, distribution and bioaccumulation in living organisms.  
12. Application of microwave technology in organic and inorganic synthesis and methodologies of reaction without solvent as “Green Chemistry” procedures.  
13. Application of microwaves for the preparation of the analytical sample in the study of active principles of botanical origin and in the analysis of cosmetic products.  
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: caviglioli@difar.unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications.  

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<table>
<thead>
<tr>
<th>Foreign languages</th>
<th>English</th>
</tr>
</thead>
</table>
| **Further information** | 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 TO THE ENVIRONMENT (CODE 6647)

Coordinator: Firpo Marco
Department of Earth, Environmental and Life Sciences (Dipartimento di Scienze della Terra, dell’Ambiente e della Vita – DISTAV)

Places: 5° – 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 € 13,638.47.

(*) 1 place reserved for grant holders from a foreign country.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
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<tbody>
<tr>
<td>Interview</td>
<td>5/7/2017, 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, 16132 Genova. The interviews may continue on 6 July. Upon explicit request and before the deadline for the application, the interview may also be done using computers (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> (+39) 3280170320</td>
</tr>
</tbody>
</table>

Further information on how to present qualifications/publications

At the risk of exclusion, candidates, in order to access the curriculum, must indicate only one of the five research themes highlighted in the public notice and attach a project on the same theme. The project will also be evaluated for its feasibility. 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. At the risk of exclusion the following documents must be attached to the application:

- a curriculum vitae et studiorum (not more than 10 pages long);
- a research project concerning one of the five themes of the doctoral course the application is for (not more than 10 pages long);
- 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;
- any other qualifications/publications relevant to the research thematics of the course (not more than 10 pages long);
- a minimum of one to a maximum of three reference letters.

Besides English and Italian, candidates can send their applications and the attached documents in Spanish or French.

Exam Syllabus

The interview will concern both an in depth discussion of the activities carried out by the Candidate and their mastery of the work tools and experimental methodologies relative to the field of research envisaged in the project they have presented.

Research themes

The doctoral course (curriculum in Biology applied to agriculture and the environment) will deal with the following five research themes:

1) Micro-recovery of liquid matrices.
2) Study of the biological properties of medicinal plants from the area of the mediterranean for their enhancement and use in the field of cosmetics and dermatology.
3) Medicinal plants used as traditional remedies for the treatment of wounds: from the empirical use to in vitro skin models.
4) Ethnobotanical investigation on the traditional uses of plants in the Kathmandu Valley (Nepal) aimed at enhancing the resources of the territory for sustainable economic growth.

Themes 1 and 2 are backed by a grant; theme 3 is reserved to candidates who have a grant from abroad; themes 4 and 5 are not backed by a grant.

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. Mario Mariotti:
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.

<table>
<thead>
<tr>
<th>Foreign languages</th>
<th>English or French or Spanish.</th>
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<tbody>
<tr>
<td>Further information</td>
<td>Prof. Mauro Mariotti</td>
</tr>
<tr>
<td></td>
<td>Dipartimento di Scienze della terra, dell'ambiente e della vita (DISTAV)</td>
</tr>
<tr>
<td></td>
<td>Corso Europa 26</td>
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<tr>
<td></td>
<td>16132 Genova</td>
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<tr>
<td></td>
<td>(+39) 0103538139</td>
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<tr>
<td></td>
<td>(+39) 3280170320</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:m.mariotti@unige.it">m.mariotti@unige.it</a></td>
</tr>
</tbody>
</table>
Course in: SCIENCE AND TECHNOLOGY FOR THE ENVIRONMENT AND TERRITORY (STET)

Curriculum: MARINE SCIENCES (CODE 6648)

**Coordinator:** Firpo Marco  
Department of Earth, Environmental and Life Sciences (Dipartimento di Scienze della Terra, dell’Ambiente e della Vita – DISTAV)

**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 €13,638.47.

(*) 1 grant from MIUR/DISTAV funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is €13,638.47.

(*) 3 places reserved for grant holders from a foreign country.

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<tbody>
<tr>
<td><strong>Interview</strong></td>
<td>5/7/2017, 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, 16132 Genova. The interviews may continue on 6 July. Upon request, the interview may also be done using computers (video conference via Skype) by contacting the person in charge of this curriculum in time. Prof. Giorgio Bavestrello Dipartimento di Scienze della Terra dell'Ambiente e della Vita (DISTAV) (+39) 010 3538031 <a href="mailto:giorgio.bavestrello@unige.it">giorgio.bavestrello@unige.it</a></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 curriculum vitae et studiorum (not more than 10 pages long);
- a research project concerning one or more of the themes of the doctoral course the application is for (not more than 10 pages long);
- 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;
- any other qualifications/publications relevant to the research thematics of the course (not more than 10 pages long);
- a minimum of one to a maximum of three reference letters. Besides English and Italian, candidates can send their applications and the attached documents in Spanish or French.

Exam Syllabus

The interview will concern both an in depth discussion of the activities carried out by the Candidate and their mastery of the work tools and experimental methodologies relative to the field of research envisaged in the project they have presented.

Research themes

The research themes can be summarized as follows:

- b) Study of the biology of fish species and of the great pelagic organisms.
- c) Study of the different aspects of the physiology of organisms and their interactions also in relation to the multiple environmental variables.
- d) Influence of endogenous, environmental and anthropogenic factors on the health of organisms.
- e) Study and characterization of natural compounds (e.g. secondary metabolites from marine organisms). Biotechnological aspects.
- f) Marine geology and geomorphology and analysis and management of coastal areas.
- h) Experimental aquaculture and stress factors in bred organisms.
- i) Development of protocols, techniques and instruments for the environmental management of marine areas (software and hardware).
- l) Abiotic factors and fluxes of matter and energy in the ecosystem.

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: giorgio.bavestrello@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.

<table>
<thead>
<tr>
<th>Foreign languages</th>
<th>English</th>
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</table>
| Further information | Prof. Giorgio Bavestrello  
Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV)  
corso Europa 26  
16132 Genova  
(+39) 0103538031  
giorgio.bavestrello@unige.it |
Course in: SCIENCE AND TECHNOLOGY FOR THE ENVIRONMENT AND TERRITORY (STET)

Curriculum: EARTH SCIENCES (CODE 6646)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Firpo Marco</th>
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<tbody>
<tr>
<td>Department of Earth, Environmental and Life Sciences (Dipartimento di Scienze della Terra, dell’Ambiente e della Vita – DISTAV)</td>
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<tr>
<td>Places: 2 – Grants: 2 (*).</td>
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<tr>
<td>(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
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Comparative assessment procedure

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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 curriculum vitae et studiorum (not more than 10 pages long);
- a research project concerning one or more of the themes of the doctoral course the application is for (not more than 10 pages long);
- 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;
- any other qualifications/publications relevant to the research thematics of the course (not more than 10 pages long);
- a minimum of one to a maximum of three reference letters. Besides English and Italian, candidates can send their applications and the attached documents in Spanish or French.

Exam Syllabus

The interview will concern both an in depth discussion of the activities carried out by the Candidate and their mastery of the work tools and experimental methodologies relative to the field of research envisaged in the project they have presented.

Research themes

The research themes of the syllabus are oriented at describing and interpreting endogenous and exogenous processes of the system Earth, integrating the vast spectrum of geosciences (disciplinary fields such as geology, geomorphology, mineralogy, crystallography, geochemistry, structural geology, petrology, mining geology, stratigraphy, paleontology, geophysics). The main objective of the syllabus is to create professional figures and young researchers capable of using advanced scientific competences and analytical frontier technologies to describe and model the processes that regulate endogenous and exogenous earth dynamics, as well as lithosphere-biosphere and lithosphere-hydrosphere interactions.

The research themes can be summarized in detail in the following points:

1. Study and modelling of the chemical and tectonic evolution of the lithosphere in convergent and extensional environments;
2. Study of the processes responsible for the genesis and evolution of the land relief forms;
3. Finding and use of natural resources, water, energy producing, mineral and lithoid, and the management and enhancement of the relative residues;
4. Evaluation and mitigation of the geological and geoenvironmental risks deriving from catastrophic events both natural and anthropic;
5. Territorial defence and planning;
6. Conservation of the natural-landscape, archaeological-monument heritage and the cultural heritage;
7. Determining and forecasting geomaterial behaviour at various temperatures and pressures as a contribution to the solution of both scientific and applicable problems;
8. Interdisciplinary study of the interaction of mineral phases with the biosphere and the...
consequent releasing, transport and capturing processes of organic and inorganic chemical species.

**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: firpo@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

**Further information**

Prof. Marco Firpo  
Dipartimento di Scienze della terra, dell’ambiente e della vita (DISTAV)  
corso Europa 26  
16132 Genova  
(+39) 0103538272  
firpo@dipteris.unige.it  
(+39) 3201812987
**Course in:** SCIENCE AND TECHNOLOGY FOR ELECTRICAL ENGINEERING, MARINE ENGINEERING, COMPLEX SYSTEMS FOR MOBILITY

**Curriculum:** ELECTRICAL ENGINEERING (CODE 6649)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Marchesoni Mario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN)</td>
<td></td>
</tr>
</tbody>
</table>

**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 € 13,638.47.

(*) 1 grant funded by ABB S.p.A. Power Grids Division, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

(*) 1 grant funded by Ansaldo Energia S.p.A., the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.

**Comparative assessment procedure**

<table>
<thead>
<tr>
<th>QUALIFICATIONS/PUBLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidates must present:</td>
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<tr>
<td>1) a research project 10 pages long maximum;</td>
</tr>
<tr>
<td>2) an updated CV;</td>
</tr>
<tr>
<td>3) a brief abstract of the specialist degree thesis.</td>
</tr>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

**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.

**Further information**

Prof. Mario Marchesoni
Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN) via all’Opera Pia 11a, I 16145 Genova
mario.marchesoni@unige.it
(+39) 0103532183

Laura Brunelli
brunelli@dinav.unige.it
(+39) 0103532286
Course in: SCIENCE AND TECHNOLOGY FOR ELECTRICAL ENGINEERING, MARINE ENGINEERING, COMPLEX SYSTEMS FOR MOBILITY

Curriculum: MARINE ENGINEERING (CODE 6650)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Marchesoni Mario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN)</td>
<td></td>
</tr>
<tr>
<td>Places: 3 – Grants: 2(*)</td>
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<tr>
<td>(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
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<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview: 6/7/2017 – 10 am, at the Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN), Polo Navale, via Montallegro 1, 16145 Genova. On request, the interview may also be done using computers (video conference via SKYPE) by getting in touch with the contact person of the curriculum, Prof. Dario Bruzzone: <a href="mailto:dario.bruzzone@unige.it">dario.bruzzone@unige.it</a> at least a week before.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Further information on how to present qualifications/pubblications</th>
<th>Candidates must present:</th>
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<tr>
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<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

| Research themes | Marine Architecture Sector: Study and application of methods to evaluate movements of the ship, of the dynamic cargoes and of the added resistance; Study and application of experimental and numeric methods for the manoeuvrability of the ship; SPH methods for the simulation of non-stationary hydrodynamic fluxes with free surface; Study of cavitation phenomena of marine propellers and of their effect in terms of induced pressure and radiated noise; Development of solutions for viscous flows related to ships on the basis of open source libraries; Study and development of design methods for special propellers; Dynamic analysis of the performance of propelling systems and of marine plants with simulation techniques; Optimization of the ship’s hydrodynamic performances and ship safety; Innovative project methods within a life-cycle perspective; Integration of the human factor for the safety and operativeness of the ship. |
|                 | Marine Constructions and Plants Sector: Study and design of offshore devices for renewable energy; Fatigue analysis of ship structures and components; Study of marine structures in composite materials; Analysis of buckling phenomena in shipbuilding; Reliability of marine structures and risk analysis; Design and construction methods to increase competitiveness in national shipbuilding; Fluid-structure interaction analysis; Inspection techniques, monitoring and maintenance for shipbuilding and marine constructions; Simulation and optimization of marine propelling systems; Activations for marine 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 contact person for the curriculum at the following email address: dario.bruzzone@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>

<table>
<thead>
<tr>
<th>Further information</th>
<th>Prof. Dario Bruzzone Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN) via all’Opera Pia 11a, I 16145 Genova <a href="mailto:dario.bruzzone@unige.it">dario.bruzzone@unige.it</a> (+39) 0103532427</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Laura Brunelli <a href="mailto:brunelli@dinav.unige.it">brunelli@dinav.unige.it</a> (+39) 0103532286</td>
</tr>
</tbody>
</table>
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 6653)

<table>
<thead>
<tr>
<th>Coordinator: Marchese Mario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Places: 2 – Grants: 1 (*)</th>
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</thead>
<tbody>
<tr>
<td>(*) 1 grant from MIUR/ DITEN funds, 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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<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</th>
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</thead>
<tbody>
<tr>
<td>Interview</td>
<td>10/7/2017 – 3.30 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 - 16145 Genova.</td>
</tr>
</tbody>
</table>

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

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, 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.

**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.

On request, the interview may also be done using computers (video conference via SKYPE) by contacting the Coordinator of the Doctoral Course, Prof. Mario Marchese, by email at the following address mario.marchese@unige.it and at phd-stiet@diten.unige.it, including their Skype address in the request.

**Research themes**

1. Hardware acceleration systems (e.g., FPGA and ASIC) for neural and machine learning paradigms.
3. Software Defined Network (SDN) paradigm applied to satellite networks.
4. Solutions to support Quality of Service through the Software Defined Network (SDN) paradigm.
6. Modeling and simulation of IOT applications for ambient assisted living.
7. Graphic simulations for games and learning of soft skills.
8. Acquisition and interpretation of data for automatic driving.
9. Acoustic image generation by innovative methodologies, with special emphasis on medical ultrasound.
10. Data Representation and Analysis from biomedical imaging: canonical models, semantic annotation, and hybrid representations.
11. Signal processing for intelligent sensing over the Internet of Things.
14. Development and experimental validation of novel signal processing and pattern recognition methodologies for information extraction from image, signal, and measurement data.
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<tr>
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<tbody>
<tr>
<td>15.</td>
<td>&quot;Inverse scattering&quot; methods for &quot;through-the-wall imaging&quot; applications.</td>
</tr>
<tr>
<td>17.</td>
<td>Probabilistic transfer learning among cognitive dynamic systems in smart environments.</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 addresses: <a href="mailto:mario.marchese@unige.it">mario.marchese@unige.it</a>; <a href="mailto:phd-stiet@diten.unige.it">phd-stiet@diten.unige.it</a>. 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.</td>
</tr>
<tr>
<td><strong>Foreign languages</strong></td>
<td>English</td>
</tr>
</tbody>
</table>
| **Further information** | Prof. Mario Marchese  
Department of Marine, Electrical, Electronic and Telecommunications Engineering  
(Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN)  
via Opera Pia 13  
16145 Genova  
mario.marchese@unige.it  
Unità di supporto alla didattica DITEN (DITEN Didactic Support Unit – Didactic Office)  
Ufficio Didattica)  
Department of Marine, Electrical, Electronic and Telecommunications Engineering  
(Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN)  
via Opera Pia 13  
16145 Genova  
phd-stiet@diten.unige.it |
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 6652)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Marchese Mario</th>
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<tbody>
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<td>10/7/2017 – 9 am at the Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN), via Opera Pia 11 A, 16145 Genova.</td>
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<td>Foreign languages</td>
<td>English</td>
</tr>
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</table>
| Further information      | Prof. Mario Marchese  
Department of Marine, Electrical, Electronic and Telecommunications Engineering  
(Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN)  
via Opera Pia 13  
16145 Genova  
mario.marchese@unige.it  
  
Unità di supporto alla didattica DITEN (DITEN Didactic Support Unit – Didactic Office)  
Ufficio Didattica  
phd-stiet@diten.unige.it |
Course in: SCIENZE E TECNOLOGIE PER L'INGEGNERIA ELETTRONICA E DELLE TELECOMUNICAZIONI
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 6654)

<table>
<thead>
<tr>
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<tr>
<td>Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN)</td>
</tr>
<tr>
<td><strong>Places:</strong> 7 – <strong>Grants:</strong> 7 (*)</td>
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<td>Interview</td>
<td>7/7/2017 – 9 am at the Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – DITEN), via Opera Pia 11 A, 16145 Genova.</td>
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Further information on how to present qualifications/pubblications

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- 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/phd2017/ResearchProjectTemplate.pdf](https://pavisdata.iit.it/data/phd2017/ResearchProjectTemplate.pdf).

Exam Syllabus

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Research themes

Theme A: Computer vision for behavioural analysis and activity recognition.
Theme B: Computer vision for the prediction of human intentions and activities.
Theme C: Part-based human body modelling for Socially-Aware Computer Vision.
Theme D: Crowd behavioural analysis and event recognition.
Theme E: Re-identification.
Theme F: Time-lapse Computer Vision for long-term 3D learning.
Theme G: 3D scene understanding and spatial reasoning for autonomous systems.
Theme H: Biomedical imaging.
Theme I: Connectomics.
Theme L: Animal behaviour analysis.

Further details on specific themes are available in a document at the following address: [https://pavisdata.iit.it/data/phd2017/ResearchTopics_IIT-PAVIS.pdf](https://pavisdata.iit.it/data/phd2017/ResearchTopics_IIT-PAVIS.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 at the following addresses: [mario.marchese@unige.it](mailto:mario.marchese@unige.it); [phd-stiet@diten.unige.it](mailto:phd-stiet@diten.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.
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</table>
| **Further information** | Prof. Mario Marchese  
Department of Marine, Electrical, Electronic and Telecommunications Engineering  
(Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN)  
via Opera Pia 13  
16145 Genova  
mario.marchese@unige.it  

Unità di supporto alla didattica DITEN (DITEN Didactic Support Unit – Didactic Office)  
Ufficio Didattica  
phd-stiet@diten.unige.it |
Course in: SOCIAL SCIENCES

Curriculum: MIGRATIONS AND INTERCULTURAL PROCESSES (CODE 6633)

<table>
<thead>
<tr>
<th>Coordinator:</th>
<th>Palumbo Mauro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR)</td>
<td></td>
</tr>
<tr>
<td>Places:</td>
<td>3 – Grants: 2 (*)</td>
</tr>
<tr>
<td>(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
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<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written test</td>
<td>6/7/2017 – 10 am at the Department of Education Sciences (Dipartimento di Scienze della Formazione – DISFOR), corso A. Podestà 2, Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>7/7/2017 – 12 noon at the Department of Education Sciences (Dipartimento di Scienze della Formazione – DISFOR), corso A. Podestà 2, Genova.</td>
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<tr>
<th>Further information on how to present qualifications/publications</th>
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<tbody>
<tr>
<td>The following will be assessed:</td>
<td></td>
</tr>
<tr>
<td>1. The quality of the research project presented.</td>
<td></td>
</tr>
<tr>
<td>2. Research experience and scientific publications.</td>
<td></td>
</tr>
<tr>
<td>3. Thesis of the 5 or 4-year degree course, which can be attached in PDF format.</td>
<td></td>
</tr>
<tr>
<td>4. Academic curriculum and degree mark.</td>
<td></td>
</tr>
<tr>
<td>The contents of the written test cannot coincide with those of the research project presented in the qualifications/publications.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Exam Syllabus</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The paper (written test) will be on one of the research themes indicated. The interview will be a discussion concerning the candidates’ research project and the qualifications/publications presented, their written test, the features of the research methods and data analysis techniques, their research project and on their research fields of interest. Furthermore, during the interview, knowledge of one of the three languages chosen by the candidate will be verified.</td>
<td></td>
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<table>
<thead>
<tr>
<th>Research themes</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>- Integration, acculturation and identity construction processes through different levels of analysis (individual, family, group),</td>
<td></td>
</tr>
<tr>
<td>- Ingroup-outgroup relationships in various contexts (educational, formative and work-related).</td>
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</tr>
<tr>
<td>- Intercultural processes in the wake of migration movements both for the countries of origin and in those of arrival.</td>
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</tr>
<tr>
<td>- Reception systems; forced migrations, environmental migrations and transformations following migrations in urban and rural contexts.</td>
<td></td>
</tr>
<tr>
<td>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).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<table>
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<tr>
<th>Foreign languages</th>
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</table>

<table>
<thead>
<tr>
<th>Further information</th>
<th>Prof. Nadia Rania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipartimento di Scienze della Formazione (DISFOR)</td>
<td></td>
</tr>
<tr>
<td>corso Podestà 2</td>
<td></td>
</tr>
<tr>
<td>16128 Genova</td>
<td></td>
</tr>
<tr>
<td>(+39) 01020953747</td>
<td></td>
</tr>
<tr>
<td><a href="mailto:nadia.rania@unige.it">nadia.rania@unige.it</a></td>
<td></td>
</tr>
<tr>
<td>Mrs Maria Luisa Cesarano</td>
<td></td>
</tr>
<tr>
<td>(+39) 01020953609</td>
<td></td>
</tr>
<tr>
<td><a href="mailto:cesarano@unige.it">cesarano@unige.it</a></td>
<td></td>
</tr>
</tbody>
</table>
Course in: SOCIAL SCIENCES

Curriculum: PSYCHOLOGY, ANTHROPOLOGY AND COGNITIVE SCIENCES (CODE 6632)

<table>
<thead>
<tr>
<th>Coordinator: Palumbo Mauro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR)</td>
</tr>
<tr>
<td>Places: 3 – 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 € 13,638.47.

<table>
<thead>
<tr>
<th>Comparative assessment procedure</th>
<th>QUALIFICATIONS/PUBLICATIONS AND EXAMINATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written test</td>
<td>6/7/2017 – 10 am Department of Education Sciences (Dipartimento di Scienze della Formazione – DISFOR), corso A. Podestà 2, Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>7/7/2017 – 2 pm 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/pubblications

- 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 can be attached in PDF format.
  4. Academic curriculum and degree mark.

Exam Syllabus

- The written test will consist in the critical discussion of an article presented by the commission, related to the themes of the curriculum (psychology, anthropology, cognitive sciences). 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 disciplinar fields of reference. Furthermore, during the interview, knowledge of English will be verified.

Research themes

1. General psychology:

2. Psychometrics

3. Developmental Psychology

4. Dynamic and clinical psychology

5. Social and work psychology

6. Anthropology:

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. Luca Andrighetto  
Dipartimento di Scienze della Formazione (DISFOR)  
Corso Podestà 2  
16128 Genova  
(+39) 01020953718  
luca.andrighetto@unige.it  

Mrs Maria Luisa Cesarano  
(+39) 01020953609  
cesarano@unige.it |

* amended on 7/6/2017
Course in: SOCIAL SCIENCES

Curriculum: POLITICAL SCIENCES (CODE 6634)

<table>
<thead>
<tr>
<th>Coordinator</th>
<th>Palumbo Mauro</th>
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<tbody>
<tr>
<td>Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR)</td>
<td></td>
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<tr>
<td>Places: 4 – Grants: 3 (*)</td>
<td></td>
</tr>
<tr>
<td>(*) 2 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
<td></td>
</tr>
<tr>
<td>(*) 1 grant from MIUR/DISPO/DISFOR funds, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638.47.</td>
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<tbody>
<tr>
<td>Written test</td>
<td>4/7/2017 – 9:30 am at the Department of Political Sciences (Dipartimento di Scienze Politiche – DISPO), Albergo dei Poveri, piazzale E. Brignole 2A (gate), Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>5/7/2017 – 2 pm at the Department of Political Sciences (Dipartimento di Scienze Politiche – DISPO), Albergo dei Poveri, piazzale E. Brignole 2A (gate), Genova.</td>
</tr>
<tr>
<td>Further information on how to present qualifications/publications</td>
<td>The contents of the written test cannot coincide with those of the research project presented in the qualifications/publications.</td>
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<table>
<thead>
<tr>
<th>Exam Syllabus</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Research themes</th>
<th>- Political ideas, ideologies, political phenomena from a historical and critical perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Promotion and safeguarding of human rights at a local, national and international level;</td>
</tr>
<tr>
<td></td>
<td>- Social and political change within democratic contexts and the transformational dynamics of political and cultural relations linked to them.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Foreign languages</th>
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</table>

<table>
<thead>
<tr>
<th>Further information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Alberto De Sanctis, Dipartimento di Scienze Politiche (DISPO) (+39) 0102099064 <a href="mailto:alberto.desanctis@unige.it">alberto.desanctis@unige.it</a></td>
<td></td>
</tr>
<tr>
<td>Mrs Maria Luisa Cesarano Dipartimento di Scienze della Formazione (DISFOR) (+39) 01020953609 <a href="mailto:cesarano@unige.it">cesarano@unige.it</a></td>
<td></td>
</tr>
</tbody>
</table>
Course in: SOCIAL SCIENCES

Curriculum: SOCIOLOGY (CODE 6631)

<table>
<thead>
<tr>
<th>Coordinator: Palumbo Mauro</th>
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<tbody>
<tr>
<td>Department of Education Sciences (Dipartimento di Scienze della Formazione – DISFOR)</td>
</tr>
<tr>
<td>Places: 3 – Grants: 2 (*)</td>
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<tr>
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<tbody>
<tr>
<td>Written test</td>
<td>6/7/2017 – 10 am at the presso Department of Education Sciences (Dipartimento di Scienze della Formazione – DISFOR), corso A. Podestà 2, Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>7/7/2017 – 2 pm at the Department of Education Sciences (Dipartimento di Scienze della Formazione – DISFOR), corso A. Podestà 2, Genova.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Further information on how to present qualifications/publications</th>
<th>The following will be assessed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The quality of the research project presented.</td>
<td>2. Research experience and scientific publications.</td>
</tr>
<tr>
<td>3. Thesis of the 5 or 4-year degree course, which can be attached in PDF format.</td>
<td>4. Academic curriculum and degree mark.</td>
</tr>
<tr>
<td>Candidates who have not reached at least 10 points out of 30 in the evaluation of their qualifications/publications will not be admitted to the written test.</td>
<td></td>
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</tbody>
</table>


<table>
<thead>
<tr>
<th>Research themes</th>
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</thead>
<tbody>
<tr>
<td>- Methodology of social and evaluative research.</td>
<td></td>
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<tr>
<td>- Evaluation of educational and social policies.</td>
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<tr>
<td>- Visual Sociology.</td>
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<tr>
<td>- Social disparities.</td>
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<tr>
<td>- Social policies.</td>
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<tr>
<td>- The youth situation.</td>
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<tr>
<td>- International migrations and new borders.</td>
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<tr>
<td>- Sociology of science</td>
<td></td>
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<tr>
<td>- Dynamics of the labour market, with special attention to the young.</td>
<td></td>
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<tr>
<td>- Gender studies.</td>
<td></td>
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<tr>
<td>- Sociology of education.</td>
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<tr>
<td>- Sociology of the family.</td>
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<tr>
<td>- Sociology of cultural processes and communication.</td>
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<tr>
<td>- Sociology of deviance.</td>
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<tr>
<td>- Sociology of organizationa and work.</td>
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</tr>
</tbody>
</table>

| 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 |

<table>
<thead>
<tr>
<th>Further information</th>
<th>Prof. Luca Guzzetti</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="mailto:luca.guzzetti@unige.it">luca.guzzetti@unige.it</a></td>
</tr>
</tbody>
</table>

| Further information | Mrs Maria Luisa Cesarano |
|---------------------| Dipartimento di Scienze della Formazione (DISFOR) |
|                     | (+39) 01020953609 |
|                     | cesarano@unige.it |
Course in: THE STUDY AND ENHANCEMENT OF THE HISTORICAL, ARTISTIC-ARCHITECTURAL AND ENVIRONMENTAL HERITAGE

Curriculum: HISTORY (CODE 6655)

Coordinator: Galassi Maria Clelia
Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST)

Places: 9 – Grants: 7 (*).

(*) 7 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13,638,47. n. 1 grant reserved for graduates from foreign Universities.

The number of grants (7) 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 EXAMINATIONS</th>
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</thead>
<tbody>
<tr>
<td>Written test</td>
<td>4/7/2017 – 9 am in the Aula (Room) Magna of the Polo didattico, via delle Fontane 10, Genova.</td>
</tr>
<tr>
<td>Interview</td>
<td>5/7/2017 – 11 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), second floor, via Balbi 6, Genova.</td>
</tr>
</tbody>
</table>

Further information on how to present qualifications/pubblications

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)
- c) a brief description of the research project proposed by the candidate (maximum 8000 strokes plus the bibliography).

Exam Syllabus
The written test will consist in a paper in Italian (or English, or French, or Spanish) to be done within four hours, on the basis of an outline (essay title), which the candidates will draw from a set of three proposals by the Examining Commission. The outlines will deal with general issues in line with the research themes of the curriculum and are aimed at highlighting the candidate’s knowledge, analytical skills and methodological tools.

The interview will be a discussion of:
1) the written test;
2) the candidate’s research project;
3) the capacity to understand a passage taken from a history text, chosen by the Commission, in the foreign language chosen by the candidate.

Research themes
The History specialization includes:

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;

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 territory, maritime history, military, cultural and religious history, with special attention to Italy and to the documentation heritage they refer to);

C) a line of research of medieval history, which concerns the history of Medieval Europe in its different expressions (political-institutional history, the history of territory, maritime history, military, cultural and religious history, with special attention to Italy and to the documentation heritage they refer to).

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 Lo Basso
(+39) 0102095585
lobasso@unige.it
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 6656)

**Coordinator:** Galassi Maria Clelia  
Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST)

**Places:** 9 (*) – **Grants:** 7 (*)

(*) 7 grants from the University, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 13.638,47, n. 1 grant reserved for graduates from foreign Universities.

The number of grants (7) 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.

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<td>Interview</td>
<td>5/7/2017 – 11 am at the Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST), second floor, via Balbi 6, 16126 Genova.</td>
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**Further information on how to present qualifications/pubblications**

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)  
c) a brief description of the research project proposed by the candidate (maximum 8000 characters plus the bibliography).

**Exam Syllabus**

The written test will consist in a paper in Italian (or English, or French, or Spanish) to be done within four hours, on the basis of an outline (essay title), which the candidates will draw from a set of three proposals by the Examining Commission. The outlines will deal with general issues in line with the research themes of the curriculum and are aimed at highlighting the candidate’s knowledge, analytical skills and methodological tools.

The interview will be a discussion of:  
1) the written test;  
2) the candidate’s research project;  
3) the capacity to understand a passage taken from a history text, chosen by the Commission, in the foreign language chosen by the candidate.

**Research themes**

The overall scope of the research proposals is directed to the study of the artistic and historical heritage and to the analysis of the issues concerning its preservation, besides the knowledge of the cultural and technical processes that characterise it, being aware of the need to present as substantial facts both the historical-territorial relations of the phenomena and their structural specificity. In this context, in a chronological period from the 11\textsuperscript{th} century to the modern age, the following lines, which constitute the curricular basis of the doctoral course, have emerged:  
a) analysis of the artistic object according to its formal components and contents;  
b) analysis of the artistic and architectural artefacts within their relations with the territory, in the dissemination processes of cultural and linguistic models, with special attention to the areas influenced by and interrelating with European culture;  
c) interaction among social, political, economic phenomena and communication through artistic forms;  
d) the client-artist-public relationship;  
e) iconographic and iconological studies;  
f) details of the religious structure in the use and production of images and in the creation of architectural models;  
g) Ligurian regional identity and its specificity in the European context;  
h) the relationship between production centres, institutions and the territory; models and replicas, centre and outskirts;  
i) analysis of technical processes in defining problems relating to historical-artistic and architectural artefacts;  
j) methodologies for the knowledge and preservation of the cultural heritage in its physical, architectural and territorial dimension.

**Information on references**

Reference letters are not required.  
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