

Doctoral School

School of Architecture and Design

Disciplines involved:

Field 08 - Civil Engineering and Architecture, Field 01 - Mathematical and Computer Sciences, Field 09 - Industrial and Computer Engineering, Field 14 - Political and Social Sciences

Director:

Gausa Navarro Manuel

Access and attendance fees, second instalment: € 850,00

Course in: ARCHITECTURE (CODE 4789)

Coordinator: Magliocco Adriano	
Department of Architectural Sciences (Dipartimento di Scienze per l'Architettura - DSA)	
Places: 4 - Grants: 2 (*)	
Places in excess reserved for non-EU citizens who reside abroad: 2 (without grant).	
(*) 1 grant from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Advanced transport and logistics, mobility info about people and goods"	
Comparative assessment procedure	Exams (written test and interview)
Written test	8 November 2012, 10 a.m., at the Department of Architectural Sciences (Dipartimento di Scienze per l'Architettura - DSA), Stradone S.Agostino 37, 16123 Genova
Interview	9 November 2012, 2 p.m., at the Department of Architectural Sciences (Dipartimento di Scienze per l'Architettura - DSA), Stradone S.Agostino 37, 16123 Genova
Exam syllabus	A paper on one of the School's research themes. An interview relating to the written test and to the candidate's research themes of interest. Candidates are allowed to present a portfolio, A3 format, containing previous study and research experiences.
Research themes	ARCHITECTURAL DESIGN: Architecture and the coastal landscape – Transformations of the coastal environment – Design as a tool for sustainable development – Theories and techniques of contemporary design: study cases – Design of infrastructures and utilization of the territory. URBAN STUDIES: transformation processes of local settlements – Instruments and methods for the management of change – Design concepts and visions – Theories and techniques of urban planning. URBAN DESIGN: Economic and strategic planning and management (architectural and urban, juridical, economic and social) of the territory: evaluation of competitiveness and feasibility, urban safety and welfare, Mediterranean port models and local public services – Re-utilization and revitalization/regeneration of urban and construction structures – Tourism, coastal, pre-coastal and inland – Real estate development and new qualitative models: technological innovations for housing quality. HISTORY OF ARCHITECTURE AND CONSERVATION OF ARCHITECTURAL AND ARTISTIC GOODS: Port cities in the Mediterranean: history and archeology – Urban landscapes and communities in ancient and medieval mediterranean port cities – Ancient and medieval fluvial port cities and the relationships with the coasts – Particular port layouts from the Middle Ages to the present – Genoa and Barcellona: history and projects for the re-utilization of ancient ports. ARCHITECTURAL AND ENVIRONMENTAL TECHNOLOGY: Sustainable tourism: state of the art and legal instruments – Evaluation of sustainability: indicators and instruments – Experimental applications of guidelines for the local authorities – Demonstrative applications (requalification and environmental compatability) – Interventions of bioclimatic requalification – Participation processes – Energy saving: innovative technologies and local regulations. Advanced requalification of the territory: integrated and sustainable; high level energetically and environmentally sustainable settlements.
Foreign languages	English or French or Spanish
For further information please contact	CONTACT PERSONS IN ADMINISTRATION: Dott.ssa Brancati 010/2095811 Arch. M. Elisabetta Ruggiero 010/2095910 e-mail: ruggiero@arch.unige.it

Doctoral School**School of Architecture and Design****Disciplines involved:**

Field 08 - Civil Engineering and Architecture, Field 01 - Mathematical and Computer Sciences, Field 09 - Industrial and Computer Engineering, Field 14 - Political and Social Sciences

Director:

Gausa Navarro Manuel

Access and attendance fees, second instalment: € 850,00

Course in: DESIGN (CODE 4790)

Coordinator: Gambaro Paola	
Department of Architectural Sciences (Dipartimento di Scienze per l'Architettura - DSA)	
Places: 4 - Grants: 2 (*)	
Places in excess reserved for non-EU citizens who reside abroad: 2 (without grant).	
(*) 2 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	6 November 2012, 9:30 a.m., at the Department of Architectural Sciences (Dipartimento di Scienze per l'Architettura - DSA), Stradone S.Agostino 37, 16123 Genova
Interview	7 November 2012, 9:30 a.m., at the Department of Architectural Sciences (Dipartimento di Scienze per l'Architettura - DSA), Stradone S.Agostino 37, 16123 Genova
Exam syllabus	Written test: development of a report on a feasible research project. Interview: a discussion concerning the themes developed in the written test.
Research themes	Product design, graphic and visual design, corporate identity, design for the enhancement of the environmental and cultural resources of the territory, product system, strategies and processes, communication, events.
Foreign languages	English or French or Spanish
For further information please contact	CONTACT PERSONS IN ADMINISTRATION: Dott.ssa Brancati 010/2095811 Arch. M. Elisabetta Ruggiero 010/2095910 e-mail: ruggiero@arch.unige.it

Doctoral School School of Architecture and Design

Disciplines involved: *Field 08 - Civil Engineering and Architecture, Field 01 - Mathematical and Computer Sciences, Field 09 - Industrial and Computer Engineering, Field 14 - Political and Social Sciences*

Director: Gausa Navarro Manuel

Access and attendance fees, second instalment: € 850,00

Course in: BOATING DESIGN AND SUSTAINABLE PRODUCTS (CODE 4791)

Coordinator: Sale Musio Massimo	
Department of Architectural Sciences (Dipartimento di Scienze per l'Architettura - DSA)	
Places: 4 - Grants: 2 (*)	
Places in excess reserved for non-EU citizens who reside abroad: 2 (without grant).	
(*) 1 grant from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Shipbuilding, aeronautics, helicopter engineering with a high foreign market penetration capacity"	
Comparative assessment procedure	Exams (written test and interview)
Written test	6 November 2012, 3 p.m., at the Department of Architectural Sciences (Dipartimento di Scienze per l'Architettura - DSA), Stradone S.Agostino 37, 16123 Genova
Interview	7 November 2012, 3 p.m., at the Department of Architectural Sciences (Dipartimento di Scienze per l'Architettura - DSA), Stradone S.Agostino 37, 16123 Genova
Exam syllabus	Written test: development of a potential research theme. Oral test: discussion of the written test, analysis of the curriculum, foreign language text reading and translation.
Research themes	Boating design, sustainable products, processes, materials, ergonomics.
Foreign languages	English or French
For further information please contact	CONTACT PERSONS IN ADMINISTRATION: Dott.ssa Brancati 010/2095811 Arch. M. Elisabetta Ruggiero 010/2095910 e-mail: ruggiero@arch.unige.it

Doctoral School School of molecular and clinical experimental biology and medicine
Disciplines involved: Field 05 - Biological Sciences, Field 03 - Chemical Sciences, Field 06 - Medical Sciences
 Director: Salamino Franca
 Access and attendance fees, second instalment: € 500,00

Course in: BIOCHEMISTRY
Specialization: BIOCHEMISTRY (CODE 4792)

Coordinator: Salamino Franca	
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES)	
Places: 2 - Grants: 1 (*).	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Human Health (study and treatment of tumours and degenerative diseases by means of new approaches based on the knowledge of the human genome)"	
Comparative assessment procedure	Exams (written test and interview)
Written test	9 November 2012, 9 a.m., at the Department of Experimental Medicine (Biochemistry Section –Dipartimento di Medicina Sperimentale - DIMES), Viale Benedetto XV 1, 16132 Genova (1st floor)
Interview	9 November 2012, 3 p.m., at the Department of Experimental Medicine (Biochemistry Section –Dipartimento di Medicina Sperimentale - DIMES), Viale Benedetto XV 1, 16132 Genova (1st floor)
Exam syllabus	The written test will focus on topics relating to General Biochemistry such as Structure and function of proteins; metabolism and its regulation; transduction of the signal. The interview will be an in-depth discussion of the written test, of any previous experiences in the field of scientific research (while candidates prepared their dissertation or other work) and questions on scientific culture. During the interview English knowledge will be tested with the reading and translation of a passage from a scientific article.
Research themes	Structural studies of molecules of natural origin by means of spectroscopic and spectrometric techniques. Study of molecular mechanisms for the regulation of cellular activity by protein mediators and not only, of natural origin.
Foreign languages	English knowledge will be tested with the reading and translation of a paragraph from a scientific paper.
For further information please contact	Contact Professor: Prof. Franca Salamino DIMES – Biochemistry Section, Viale Benedetto XV,1 Tel 0103538160; e-mail: salamino@unige.it

Doctoral School School of molecular and clinical experimental biology and medicine
Disciplines involved: Field 05 - Biological Sciences, Field 03 - Chemical Sciences, Field 06 - Medical Sciences
 Director: Salamino Franca
 Access and attendance fees, second instalment: € 500,00

Course in: BIOCHEMISTRY
Specialization: NEUROCHEMISTRY AND NEUROBIOLOGY (CODE 4793)

Coordinator: Salamino Franca	
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES)	
Places: 4 - Grants: 2 (*).	
(*) 2 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	12 November 2012, 9 a.m., at the Department for the Study of the Territory and its Resources (Dipartimento per lo Studio del Territorio e sue Risorse - DIPTERIS) (formerly DIBIO), Palazzina delle Scienze, Room first floor, Viale Benedetto XV, 5 16132 Genova
Interview	12 November 2012, 3 p.m., at the Department for the Study of the Territory and its Resources (Dipartimento per lo Studio del Territorio e sue Risorse - DIPTERIS) (formerly DIBIO), Palazzina delle Scienze, Room first floor, Viale Benedetto XV, 5 16132 Genova
Exam syllabus	The written test will be on topics relating to Neurochemistry and Neurosciences. The interview will be an in-depth discussion of the written test, of any previous experiences in the field of scientific research (while candidates prepared their dissertation or other work) and questions on scientific culture. During the interview English knowledge will be tested with the reading and translation of a passage from a scientific article.
Research themes	Neuropharmacology, developmental neurobiology, neuromodulators and neurotransmitters, neurotrophic factors.
Foreign languages	English knowledge will be tested with the reading and translation of a paragraph from a scientific paper.
For further information please contact	Contact Professor: Prof. Mario Pestarino, DIPTERIS (ex DIBIO) Palazzina delle Scienze. V.le Benedetto XV, 5, 16132 Genova. Telephone: (+39) 010353 – 8043 Fax: (+39) 010353 - 3062 e-mail: pesta@unige.it ; Personal website: http://www.dibio.unige.it/PESTARINO_000.htm

Doctoral School School of molecular and clinical experimental biology and medicine
Disciplines involved: Field 05 - Biological Sciences, Field 03 - Chemical Sciences, Field 06 - Medical Sciences
 Director: Salamino Franca
 Access and attendance fees, second instalment: € 500,00

Course in: BIOTECHNOLOGIES
Specialization: VASCULAR AND BIOLOGY SURGERY (CODE 4794)

Coordinator: Tonetti Michela	
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES)	
Places: 2 - Grants: 1 (*).	
(*) 1 grant from the University	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	5 November 2012 at 11 a.m. in the Auletta Sezione Biochimica (Small room of the Biochemistry Section) of the Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES), Viale Benedetto XV 1, 16132 Genova
Exam syllabus	The interview will be a discussion of the candidate's qualifications/publications and previous research activities. Furthermore general knowledge of Biology and Vascular Surgery will be assessed.
Research themes:	Abdominal aortic aneurysms: location of the probable rupture site of abdominal aortic aneurysms associating non invasive and metabolic imaging techniques like PET Ct, and PIV reconstructions of fluid dynamics. Evaluation of the modulation of the tissue and circulatory inflammatory response in patients needing reparatory surgery of abdominal aorta aneurysms by inhibiting the angiotensin receptor. Atherosclerosis disease of TSAs: Evaluation of the role of serum markers of systemic inflammation and the characteristics of the activation of inflammatory cells and the local characteristics of pro-inflammatory factors in patients with symptomatic and non-symptomatic carotid stenosis. Correlation between vascular diseases (peripheral arteropathy and abdominal aortic aneurysm) and length of telomeres, in order to single out a new marker of vascular senescence. Experimental Surgery: Experimentation of biodegradable prosthesis inoculated with stem cells; Evaluation of the protective and anti-inflammatory effects of Resveratrol, a natural polyphenol, after causing abdominal aortic aneurysms in rats.
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. Michela Tonetti, Sezione Biochimica – Dipartimento di Medicina Sperimentale (DIMES), Viale Benedetto XV,1 16132 Genova. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English
For further information please contact	Prof. Michela Tonetti, Biochemistry Section – DIMES, Viale Benedetto XV,1 16132 Genova. Tel 010-3538151 e-mail: tonetti@unige.it

Doctoral School School of molecular and clinical experimental biology and medicine
Disciplines involved: Field 05 - Biological Sciences, Field 03 - Chemical Sciences, Field 06 - Medical Sciences
 Director: Salamino Franca
 Access and attendance fees, second instalment: € 500,00

Course in: BIOTECHNOLOGIES
Specialization: BIOTECHNOLOGIES (CODE 4795)

Coordinator: Tonetti Michela	
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES)	
Places: 2 - Grants: 2 (*)	
(*) 1 grant from the University	
(*) 1 as per Ministerial Decree 198/03 main field of research "New applications in the biomedical industry"	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	5 November 2012 at 2 p.m. in the Auletta Sezione Biochimica (Small room of the Biochemistry Section) of the Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES), Viale Benedetto XV 1, 16132 Genova
Exam syllabus	The interview will focus on topics relating to Biochemistry, cellular Biology and molecular Biology and on thematic concerns concerning research topics. Furthermore the candidate's research activities will be discussed.
Research themes	1) Tissue engineering. 2) Activating and deactivating mechanisms of receptors of ErbB growth factors in the pathogenesis and therapy of tumours. 3) Biology of chronic lymphatic leukaemias: index of the immunoglobulins expressed on the surface of leukaemia cells.
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. Michela Tonetti, Sezione Biochimica – Dipartimento di Medicina Sperimentale (DIMES), Viale Benedetto XV,1 16132 Genova. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English
For further information please contact	Prof. Michela Tonetti, Biochemistry Section – DIMES, Viale Benedetto XV,1 16132 Genova. Tel 010-3538151 e-mail: tonetti@unige.it

Doctoral School School of molecular and clinical experimental biology and medicine
Disciplines involved: Field 05 - Biological Sciences, Field 03 - Chemical Sciences, Field 06 - Medical Sciences
 Director: Salamino Franca
 Access and attendance fees, second instalment: € 500,00

Course in: PHARMACOLOGY AND TOXICOLOGY
Specialization: BIOLOGY AND PATHOLOGY OF AGEING (CODE 4796)
Associated Universities: University of Pisa (joint qualification awarded)

Coordinator: Marchi Mario	
Department of Pharmacy (Dipartimento di Farmacia - DIFAR)	
Places: 2 - Grants: 1(*)	
(*) 1 grant from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	6 November 2012, 9 a.m., in the General Pathology Division of the Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES), Via Leon Battista Alberti 2, 16132
Interview	6 November 2012, at 2 p.m., in the General Pathology Division of the Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES), Via Leon Battista Alberti 2, 16132
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	Age-induced molecular and biochemical changes; ageing markers; pharmacological prevention and therapy of ageing mechanisms; pathophysiology of alterations of cell signalling in damaged organs, also of the neoplastic type, age-related; ageing pathogenesis in the sensory system.
Foreign languages	English
For further information please contact	Mrs Roberta Catelani, Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES), General Pathology Division, Via Leon Battista Alberti 2, Genova. Tel. 010/3538833. e-mail: patgen@unige.it

Doctoral School School of molecular and clinical experimental biology and medicine
Disciplines involved: Field 05 - Biological Sciences, Field 03 - Chemical Sciences, Field 06 - Medical Sciences
 Director: Salamino Franca
 Access and attendance fees, second instalment: € 500,00

Course in: PHARMACOLOGY AND TOXICOLOGY
Specialization: PHARMACOLOGY AND TOXICOLOGY (CODE 4797)

Coordinator: Marchi Mario	
Department of Pharmacy (Dipartimento di Farmacia - DIFAR)	
Places: 4 - Grants: 2 (*).	
(*) 1 grant from the University	
(*) 1 grant as per Ministerial Decree 198/03 "The relaunching of the pharmaceutical industry also by means of the fine chemistry of natural compounds for new diagnostic applications and new active principles"	
Comparative assessment procedure	Exams (written test and interview)
Written test	5 November 2012, 9:30 a.m., at the Department of Pharmacy, Pharmacology and Toxicology Section (Dipartimento di Farmacia - Sezione di Farmacologia e Tossicologia) Viale Cembrano 4 - 16148 Genova
Interview	5 November 2012, 2 p.m., at the Department of Pharmacy, Pharmacology and Toxicology Section (Dipartimento di Farmacia - Sezione di Farmacologia e Tossicologia) Viale Cembrano 4 - 16148 Genova
Exam syllabus	The written test will concern topics on General and Clinical Pharmacology as well as General and Special Toxicology. The interview will be a detailed discussion of the written paper 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.
Foreign languages	English
For further information please contact	Contact Professor: Prof. Ernesto Fedele, Department of Pharmacy (Dipartimento di Farmacia - DIFAR), Viale Cembrano 4, 16148 Genova. Tel. 010 3532120 e-mail: fedele@pharmatox.unige.it

Doctoral School School of Classic and Modern Cultures
Disciplines involved: Field 10 - Antiquities, Philological-Literary and Historical and Artistic Sciences
Director: Verdino Stefano Fernando
Access and attendance fees, second instalment: € 250,00

Course in: PHILOLOGY, INTERPRETATION AND HISTORY OF ITALIAN AND ROMANCE TEXTS (CODE 4798)

Coordinator: Marini Quinto	
Department of Italian and Romance languages, Classical Studies, Arts and Performing Arts (Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo - DIRAS)	
Places: 4 - Grants: 2 (*)	
(*) 2 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	7 November 2012, 9 a.m., at the Faculty of Letters (Facoltà di Lettere), Via Balbi, 2, Room 8, 4th floor - 16126 Genova
Interview	8 November 2012, 9 a.m., at the Department of Italian and Romance languages, Classical Studies, Arts and Performing Arts (Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo - DIRAS), Via Balbi, 6 - 16126 Genova
Exam syllabus	Written test Historical and literary comment and illustration of a text in verse or prose, or discussion of a theoretical or critical text concerning one of the following disciplines: Italian literature, Italian linguistics, Italian philology, Romance philology and linguistics, modern and contemporary Italian literature, literary theory, history of Italian literary criticism, Italian theatre literature. Interview Discussion of the written examination and the candidate's research project. Translation of a passage from English or French. The examining commission proposes to direct the graduate student towards a project that it deems suitable for his/her abilities and skills, as well as being congruent with the research lines of the Doctoral course.
Research themes	Centrality of the literary text as the essence of the philological and critical investigation, and research themes covering a vast diachronic period which goes from the origins of "vulgar" literatures to Italian contemporary literature, not only from a comparative perspective, but according to methodologies that useful for an interpretative experience of strict historic and philological rigour, open to the instances of human sciences and to the phenomenology of literary texts. According to this, the previous remarkable experience is taken up again and positively relaunched, first as an independent Doctoral course (1999-2002) then as a Specialization of the PhD in "Ancient Times and Literary Philological Sciences" (2003-2005), singling out in the widening of the methodological and cultural perspectives and in the reference to a clearer and more precise modern sphere, besides the objectivity of intercultural exchanges among different national literatures, the reasons for the further development of scientific relationships within the Doctoral School. The research activity, while continuing to respect the need to introduce different study experiences but, as the previous important results prove, very fruitful, is linked to the different national and international research projects which have been approved and confirmed for the next years. Italian lexicology and lexicography; Comedy, satire, parody: medieval, modern and postmodern themes and practices; Forms of narration, of representation in Genoa in the Seventeenth and Eighteenth centuries; Italy and Spain in the Sixteenth and Seventeenth centuries; The passing on of knowledge of the Italian "dell'Arte" actors in the Eighteenth century; Literary Archives of the Twentieth century, Twentieth century critical editions, Comment to the Metastasio Letters; the "piscatorial" forms of the pastoral fable of the Fifteenth, Sixteenth, and Seventeenth centuries; The cultural and literary workshop of the Mazzini period (the latter two are PRIN 2008 projects financed by MIUR – the Italian Ministry for Education, Universities and Research – for two groups of Italianists of the DIRAS. The local professors who are scientifically responsible for it are prof. A. Beniscelli and prof. Q. Marini, and the national coordinators are prof. G. Baldassarri of the University of Padua and prof. G. Ferroni of the University La Sapienza of Roma).
Foreign languages	English and French
For further information please contact	E-mail quinto.marini@unige.it , Department of Italian and Romance languages, Arts and Performing Arts (Dipartimento di Italianistica, Romanistica, Arti e Spettacolo - DIRAS), via Balbi 2, 16126 Genova e-mail Giorgio.Bertone@unige.it , Department of Italian and Romance languages, Arts and Performing Arts (Dipartimento di Italianistica, Romanistica, Arti e Spettacolo - DIRAS), via Balbi 6, 16126 Genova e-mail Franco.Vazzoler@unige.it , Department of Italian and Romance languages, Arts and Performing Arts (Dipartimento di Italianistica, Romanistica, Arti e Spettacolo - DIRAS), via Balbi 2 16126 Genova

Doctoral School School of Classic and Modern Cultures
Disciplines involved: *Field 10 - Antiquities, Philological-Literary and Historical and Artistic Sciences*
Director: Verdino Stefano Fernando
Access and attendance fees, second instalment: € 250,00

Course in: EURO-AMERICAN COMPARATIVE LITERATURE (CODE 4799)

Coordinator: Sertoli Giuseppe	
Department of Modern Languages and Cultures	
Places: 4 - Grants: 2 (*).	
(*) 2 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	5 November 2012 at 9 a.m., at the Department of Modern Languages and Cultures (Dipartimento di Lingue e culture moderne) – Piazza S. Sabina 2, 16124 Genova
Interview	12 November 2012 at 10 a.m., at the Department of Modern Languages and Cultures (Dipartimento di Lingue e culture moderne) – Piazza S. Sabina 2, 16124 Genova
Exam syllabus	The written test – in Italian or English, the candidate may choose – will be a paper on one of the themes or research topics in the section below. The interview will be a discussion of the written paper and of at least one research project – relevant to the same topic and preferably involving a comparative approach – which the candidate must enclose with his/her application form. The Teaching Body reserves the right to assign different research projects to candidates admitted to the doctoral course, should the project submitted be impracticable.
Research themes	1. The canon issue in modern and contemporary Euro-American literature: a) national and supranational cultural identities; b) literary genres; c) gender issues; 2. Cities in modern and contemporary Euro-American literature.
Further information on how to present qualifications/publications	In order to better evaluate the candidates' aptitude for research, they are advised to hand in a copy of their thesis and any publications in the Secretarial office of the Department of Modern Languages and Cultures - Piazza S.Sabina 2, 16124 Genova. The copies can be collected from there when the public exam procedure is over.
Foreign languages	During the oral examination the candidates' knowledge of at least two languages from among those taught in the Department of Modern Languages and Cultures: French, English, German, Spanish, Portuguese, Russian, Polish, Scandinavian Languages, will be evaluated.
For further information please contact	Contact Professor: Prof. Giuseppe Sertoli Department of Modern Languages and Cultures Tel.: 010-2099557 E-mail: Giuseppe.Sertoli@lingue.unige.it

Doctoral School School of Classic and Modern Cultures
Disciplines involved: Field 10 - Antiquities, Philological-Literary and Historical and Artistic Sciences
Director: Verdino Stefano Fernando
Access and attendance fees, second instalment: € 250,00

Course in: SCIENCES OF ANCIENT TIMES
Specialization: CLASSICAL PHILOLOGY AND ITS TRADITIONS AND PROJECTIONS (CODE 4800)

Coordinator: Montanari Franco	
Department of Ancient Times, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia - DAFIST)	
Places: 2 - Grants: 1 (*)	
(*) 1 grant from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	7 November 2012, 9 a.m., at the Department of Ancient Times, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia - DAFIST) Linguistic and Literary Section, Via Balbi, 4, 3rd floor, 16126 Genova.
Interview	8 November 2012, 2 p.m., at the Department of Ancient Times, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia - DAFIST) Linguistic and Literary Section, Via Balbi, 4, 3rd floor, 16126 Genova.
Exam syllabus	- The written test will be a translation from Latin or Greek (the candidate may choose) with a philological and exegetic comment. - The interview will be a discussion in which the candidate will illustrate his/her research project, and a discussion of the written test.
Research themes	- Greek philology and literature and its projections and traditions; - Latin philology and literature and its projections and traditions; - Tradition and success of ancient Christian texts; - Didactics of the Greek and Latin languages and literature, with experimentation models.
Foreign languages	English or French or Spanish or German. During the oral examination the candidates must show their knowledge of at least two languages from among those indicated above, besides Italian. The commission, upon request, may allow foreign candidates to do the tests in their own language.
For further information please contact	Prof.ssa Silvana Rocca DAFIST (former DARFICLET) – Linguistic-Literary Section (Sezione Linguistico-letteraria) tel. 010/2099737 or 010/2099722 e-mail: roccas@lettere.unige.it Secretary's office: - Dott.ssa Valeria Motosso DAFIST (former DARFICLET), Via Balbi 4, 16126 Genova tel.: 010209 9719, fax: 010 209 9797, e-mail: Valeria.Motosso@lettere.unige.it

Doctoral School School of Classic and Modern Cultures
Disciplines involved: Field 10 - Antiquities, Philological-Literary and Historical and Artistic Sciences
Director: Verdino Stefano Fernando
Access and attendance fees, second instalment: € 250,00

Course in: SCIENCES OF ANCIENT TIMES
Specialization: HISTORICAL SCIENCES OF ANCIENT TIMES (CODE 4801)

Coordinator: Montanari Franco	
Department of Ancient Times, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia - DAFIST)	
Places: 2 - Grants: 1 (*).	
(*) 1 grant from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	5 November 2012, 9 a.m., at the Faculty of Arts and Philosophy (Facoltà di Lettere e Filosofia) (room 1 of the Faculty), Via Balbi, 2, 16126 Genova
Interview	9 November 2012, 9 a.m., at the Department of Italian and Romance languages, Classical Studies, Arts and Performing Arts (Dipartimento di Italianistica, romanistica, antichistica, arti e spettacolo – DIRAAS former DISAM – Ancient History Section) in the room of the Department, Via Balbi, 4, 1st floor, 16126 Genova
Exam syllabus	- A written test dealing with the themes contemplated in the curricula of the research themes in the light of the ancient sources and the modern bibliography; - An interview in which the candidate will discuss his/her written examination and illustrate his/her research fields of interest, also on the basis of previous work stated in his/her curriculum vitae et studiorum.
Research themes	a) Between the East and the West: international relations in the ancient world; b) Greek Civilization: historical, political, institutional, social, economic, religious and cultural aspects; c) Roman Civilization: historical, political, institutional, social, economic, religious and cultural aspects; d) Late Ancient and Byzantine Civilization; e) Greek and Roman archeology and history of art: archeological research methods.
Foreign languages	English or French or Spanish or German. During the interview candidates must show their knowledge of at least two of the languages indicated above, besides Italian. The commission, on request, may allow foreign candidates to do the tests in their own language.
For further information please contact	Prof. Gianfranco Gaggero DIRAAS (former DISAM – Ancient History Section) tel.: 010 209 9768, fax: 010 209 5468, e-mail: gianfranco.gaggero@unige.it Secretary's office: - Dott.ssa Valeria Motosso DAFIST (former DARFICLET), Via Balbi 4, 16126 Genova tel.: 010209 9719, fax: 010 209 9797, e-mail: Valeria.Motosso@lettere.unige.it

Doctoral School **School of Law**
Disciplines involved: *Field 12 - Law Studies*
 Director: Guastini Riccardo
 Access and attendance fees, second instalment: € 55,00

Course in: CIVIL, CORPORATE AND INTERNATIONAL LAW (CODE 4802)

Coordinator: Ivaldi Paola	
Department of Law Studies	
Places: 6 - Grants: 3 (*).	
(*) 3 grants from the University	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	12 November 2012, at 9 a.m., at the former Department of Private, International and Commercial Law "G.L.M. Casaregi" (Dipartimento di diritto privato, internazionale e commerciale "GLM Casaregi") – Division of International Law, Via Balbi, 22 – 7/B, 16126 GENOVA. The interview with candidates who reside abroad may be done via teleconference.
Exam syllabus	The interview will deal with the candidates' qualifications/publications and research project.
Research themes	Within the doctoral course in civil, corporate and international law, three research themes are taken into account, which in essence correspond to the disciplinary "areas" (and corresponding "competences") that are inherent to them. These themes moreover are part of a unitary framework, characterised by the sharing of the same sources, by a multilevel protection system and by the multidisciplinary of the approach. The first research theme concerns the evolution of the reference frame of contemporary private law, moving from the new order of its sources. With this outlook, the evolutionary lines of the system will be analysed with special reference to two classic themes of civil law, i.e. the contract and (civil) liability. The second research theme concerns some profiles of corporate governance, in particular in quoted companies, and is characterised by an interdisciplinary methodological approach. The subjects dealt with will, as a matter of fact, be studied from both a juridical and economic point of view but ample room will be left to deal with the main European systems and the American legal system. Finally, the third research theme deals with some of the most significant recent developments in International and Community law, analysed from the point of view of the widening of rights guaranteed to individuals and their "effective" juridical safeguard (at an international, community and internal level) and in the light of the "new" guarantees (laws and procedures) offered, on an internal basis, by the relevant international and community sources.
Further information on how to present qualifications/publications	Qualifications/publications refers to the information in the application and curriculum vitae et studiorum, the research project, other publications. The latter should not be longer than ten pages each. The application and its attachments may be written in Italian, English or French.
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.ssa Paola Ivaldi , all'indirizzo: ex Dipartimento di diritto privato, internazionale e commerciale "G.L.M. Casaregi", Sezione di Diritto internazionale, via Balbi 22 - 7/B, 16126 Genova or to her email address: paola.ivaldi@giuri.unige.it . The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English
For further information please contact	Contact person in administration: Dott.ssa Monica Sitzia Former Department of Private, International and Commercial Law "G.L.M. Casaregi", International Law Section (Dipartimento di diritto privato, internazionale e commerciale "G.L.M. Casaregi", Sezione di Diritto internazionale), via Balbi 22 - 7/B, 16126 Genova. e-mail: Monica.Sitzia@unige.it tel.: 010/2099978 fax: 010/265333

Doctoral School **School of Law**
Disciplines involved: *Field 12 - Law Studies*
 Director: Guastini Riccardo
 Access and attendance fees, second instalment: € 55,00

Course in: CRIMINAL LAW AND PROCEDURE (CODE 4803)

Coordinator: Pisa Paolo	
Department of Law Studies	
Places: 4 - Grants: 2 (*).	
(*) 2 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	8 November 2012, 9 a.m., at the Department of Law Studies (Dipartimento di Giurisprudenza), via Balbi 30/10, 16126 Genova
Interview	9 November 2012, 8:30 a.m., at the Department of Law Studies (Dipartimento di Giurisprudenza), via Balbi 30/10, 16126 Genova
Exam syllabus	a) Issues concerning the general part and the special part of Criminal Law; b) Issues concerning criminal trials, also in reference to the European, International and comparative perspective; c) Themes linked to penitentiary legislation in force with special reference to the latest reforms as well.
Research themes	<p>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 with particular reference to property measures; forms of transnational criminality; the criminal defence of financial markets; corporate offences; analysis of the themes concerning complicity of people; the regulation of non-EU immigration and the crimes linked to clandestine immigration; the regulation of the circulation of citizens who belong to the European Union.</p> <p>Penitentiary law. Analysis of the numerous innovations recently introduced in the legal order and of those in itinere: in particular, of the legislative novelties aimed at dealing with prison overcrowding (law n. 9 of 17/02/2012 the so-called 'empty jails-bis' law - 'svuotacarceri-bis').</p> <p>Penal procedure. Given the persistent climate of continuous reform, the research favours the themes subject-matter of recent legislative interventions, in parallel with the evolution of jurisprudential orientations. In particular the following are pointed out: the revision of the "internal" penal judgement following the investigation of the European Court of Human Rights of the violation of the ECHR, in the light of the constitutional judgement n. 113 of 7 April 2011; law projects for the reform of the system of penal impugment and those in the field of wire-tapping. Methodologically, systematic reconstructive lines are set against the fragmentary nature of the reforms.</p> <p>Comparative Procedural Criminal Law: the American trial system with special attention to the recent "emergency" reforms, to the evolution of the jurisprudence concerning the rights of the accused and the innovations in sentencing in the federal system.</p> <p>Preparation of a European Statute of the accused and of the condemned minor.</p> <p>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.</p>
Foreign languages	English or French or German
For further information please contact	Contact person in administration: Dott.ssa M. Stefania Lavezzo Tel. 010 2095436 e-mail: 55563@unige.it

Doctoral School School of Law
Disciplines involved: Field 12 - Law Studies
 Director: Guastini Riccardo
 Access and attendance fees, second instalment: € 55,00

Course in: PHILOSOPHY OF LAW AND LEGAL BIO-ETHICS (CODE 4804)

Coordinator: Guastini Riccardo	
Department of Law Studies	
Places: 4 - Grants: 2 (*).	
(*) 2 grants from the University	
Comparative assessment procedure	Qualifications/Publications
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 - Animal rights - Legal bioethics: euthanasia, artificial insemination, MD-patient relationships, transplants, experiments on animals - History and theory of legal dogmatics.
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: guastini@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
For further information please contact	Prof. Riccardo Guastini, via Balbi, 30/18 - 16126 Genova tel. 010/2099975 fax 010/2099955 e-mail guastini@unige.it Simona Ruggiero, tel 010/2099925 e-mail simona.ruggiero@giuri.unige.it .

Doctoral School **School of Law**
Disciplines involved: *Field 12 - Law Studies*
 Director: Guastini Riccardo
 Access and attendance fees, second instalment: € 55,00

Course in: COMPARATIVE CONSTITUTIONAL SYSTEMS (CODE 4805)

Coordinator: Rolla Giancarlo	
Department of Law Studies	
Places: 4 - Grants: 2 (*)	
Places in excess reserved for non-EU citizens who reside abroad: 2 (without grant).	
(*) 2 grants from the University	
Comparative assessment procedure	Qualifications/Publications and Interview
Date of interview:	13 November 2012, 4 p.m. at the Department of Law Studies (Dipartimento di Giurisprudenza), Via Balbi 30, 3 piano
Exam syllabus:	The interview will be on the basis of the research project and any research experiences
Research themes	<p>a) Evolution of the rule of law.</p> <p>b) Process of the strengthening of the democratic State in recent democracies. Within this area, the aim is to thoroughly investigate new ways of exercising constitutional power, balance mechanisms among powers, the enhancement of guarantee bodies and case law and institutional tools for the safeguard of fundamental rights. The most important geographic area taken into consideration is that which concerns central and southern American countries, since in the last thirty years they have democratically consolidated their systems in a significant manner and therefore may represent a particularly fruitful study area for the development of modern constitutionalism.</p> <p>c) Supranational protection system of fundamental rights. In many territorial areas mechanisms of defence of rights at a supranational level have developed thus establishing a so-called multilevel protection system. Besides the analysis of international sources, investigations will concern the line of decisions of international courts and above all their influence on national judicial bodies. The system of the European Charter of Fundamental Rights which integrates that of the Convention of the European Union, as well as the Inter- American Convention of Fundamental Rights, is referable to this line of investigation.</p> <p>d) Safeguarding and promotion of cultural diversities, the influence of multiculturalism on codification and legal reasoning on court decisions.</p> <p>e) Political and economic integration of migrants, with reference to social rights, public policies, forms of representation, the equality principle.</p>
Further information on how to present qualifications/publications	<p>The following must ensue from the curriculum and attachments:</p> <p>a) degree mark;</p> <p>b) the dissertation title of the specialist or "magistrale" degree (3+2 or 5 year degree course);</p> <p>c) any post lauream study qualifications with research themes of the doctoral course;</p> <p>d) any research experience and research activities and training abroad that are coherent with the research themes of the doctoral course;</p> <p>e) the level of language knowledge.</p> <p>Candidates' whose qualifications/publications and research project are not coherent with the research themes of the doctoral course will not be admitted to the interview.</p>
Foreign languages:	English or French or Spanish
Information on references	Reference letters will not contribute to the final grade.
For further information please contact	<p>Coordinator of the Doctoral Course:</p> <p>Prof. Giancarlo Rolla e-mail: Rolla@unige.it</p> <p>Contact person in administration: Dott.ssa M. Stefania Lavezzo e-mail: 55563@unige.it</p>

Doctoral School **School of Clinical Experimental Internal Medicine**
Disciplines involved: *Field 06 - Medical Sciences*
 Director: Savarino Vincenzo
 Access and attendance fees, second instalment: € 200,00

Course in: CARDIO, VASCULAR, RENAL AND METABOLIC BIOLOGY AND PHYSIOPATHOLOGY (CODE 4806)

Coordinator: Brunelli Claudio	
Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche - DIMI)	
Places: 4 - Grants: 2 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 2 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	6 November 2012, 9 a.m., in Room C (Aula C) of the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche - DIMI), Viale Benedetto XV 6, ground floor, 16132 Genova
Interview	6 November 2012, 2 p.m., in Room C (Aula C) of the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche - DIMI), Viale Benedetto XV 6, ground floor, 16132, Genova
Exam syllabus	The written test will be on topics relating to: cellular and molecular biology, cell cycle, apoptosis; tissue damage and repair mechanisms in atherosclerosis; diabetes, inflammation, renal failure. The oral exam will be an interview which comprises a discussion of the first test and the illustration of the candidates' research field of interest, also on the basis of previous activities stated in their curriculum vitae.
Research themes	CARDIOVASCULAR DISEASES: study of acute coronary syndromes and of the pathogenic and physiopathological aspects of coronary and aortic atherosclerosis disease. Mechanisms of artery thrombosis and the possible role of oxidizing stress in the pathogenesis of acute coronary syndromes and of aortic aneurysms. The themes will be developed both with study projects on experimental animal models and with studies on patients affected by coronary diseases. KIDNEY DISEASES/arterial hypertension: determinants of renal and extra renal damage in patients with essential arterial hypertension. Microalbuminuria/proteinuria as predictors of renal and cardiovascular damage and light renal dysfunctions. The themes are developed with study projects on a wide range of clinical case studies. ENDOCRINOLOGY: clinical and basic research relating to the pathophysiology of hypophysis secretion, mainly focusing on the IGF system and the hypothalamus-somatotropin-prolactin axis. METABOLISM: pathophysiology of insulin resistance and of diabetes mellitus type 2, cellular mechanisms of insulin activity and of other growth factors.
Foreign languages	English
For further information please contact	Department contact professors: Prof. Claudio Brunelli (Coordinator of the Course), tel. 010-3538963, e-mail: bc@unige.it ; Prof. Giacomo Garibotto, tel. 010-3538989, e-mail: gari@unige.it ; Prof. Francesco Minuto, tel. 010-3537955, e-mail: minuto@unige.it Contact person in administration: Paolo Bava, tel. 010-3537542, e-mail: paolo.bava@unige.it

Doctoral School **School of Clinical Experimental Internal Medicine**
Disciplines involved: *Field 06 - Medical Sciences*
 Director: Savarino Vincenzo
 Access and attendance fees, second instalment: € 200,00

Course in: INTERNAL MEDICINE, AUTOIMMUNITY AND DISEASES OF THE DIGESTIVE TRACT
Specialization: RESPIRATORY ALLERGOLOGY AND PHYSIOPATHOLOGY, CLINICAL AND EXPERIMENTAL (CODE 4807)

Coordinator: Bagnasco Marcello Ferruccio	
Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche - DIMI)	
Places: 2 - Grants: 1 (*).	
(*) 1 grant from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	8 November 2012, 9 a.m., in Room C (Aula C) of the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche - DIMI) (ground floor), viale Benedetto XV 6, 16132 Genova
Interview	8 November 2012, 2 p.m., in Room C (Aula C) of the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche - DIMI) (ground floor), viale Benedetto XV 6, 16132 Genova
Exam syllabus	The written test will be on topics relating to internal medicine and cellular and molecular biology and immunology applied to internal medicine and to pneumology with special reference to the physiopathological situations subject-matter of the research themes. The interview will consist in a discussion of the written test and of the candidates' research field of interest, also on the basis of their curriculum vitae.
Research themes	Pathogenic and cellular analysis, and analysis of the mediators of the allergic inflammation. The relationships between allergic inflammations and bronchomotricity, study of pharmacological and immunotherapeutic effects on allergic inflammation and on bronchial reactivity from a clinical and experimental point of view. Advanced therapeutic strategies in allergology and pneumology. Function and structure of the bronchial wall: study of the inflammatory processes and of molecular, cellular and tissue remodelling. Physiopathology of the obstruction of the respiratory tracts: mechanisms of bronchial obstruction at rest and under stress. Clinical physiopathology: instrumental tests of the respiratory function.
Foreign languages	English
For further information please contact	Department contact professors: Prof. Marcello Bagnasco (Coordinator of the Course), tel. 010-3537979, e-mail: bagnasco@csita.unige.it Prof. Giorgio W.Canonica. Tel. 010-3538933, e-mail: canonica@unige.it Contact person in administration: Paolo Bava, tel. 010-3537542, e-mail: paolo.bava@unige.it

Doctoral School **School of Clinical Experimental Internal Medicine**
Disciplines involved: *Field 06 - Medical Sciences*
Director: Savarino Vincenzo
 Access and attendance fees, second instalment: € 200,00

Course in: INTERNAL MEDICINE, AUTOIMMUNITY AND DISEASES OF THE DIGESTIVE TRACT
Specialization: INTERNAL MEDICINE, AUTOIMMUNITY AND DISEASES OF THE DIGESTIVE TRACT (CODE 4808)

Coordinator: Bagnasco Marcello Ferruccio	
Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche - DIMI)	
Places: 4 - Grants: 2 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 2 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	8 November 2012, 9 a.m., in Room C (Aula C) of the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche - DIMI) (ground floor), viale Benedetto XV 6, 16132 Genova
Interview	8 November 2012, 2 p.m., in Room C (Aula C) of the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche - DIMI) (ground floor), viale Benedetto XV 6, 16132 Genova
Exam syllabus	The written test will be on topics relating to internal medicine and cellular and molecular biology and immunology applied to internal medicine, gastroenterology and odontostomatology with special reference to the physiopathological situations subject-matter of the research themes. The interview will consist in a discussion of the written test and of the candidates' research field of interest, also on the basis of their curriculum vitae.
Research themes	IMMUNOREGULATION AND AUTOIMMUNE PATHOLOGIES: the role of molecular mechanisms of co-stimulation. THYROID PATHOLOGIES AND POLYGLANDULAR AUTOIMMUNE SYNDROMES: molecular, diagnostic-and epidemiological, and therapeutic aspects; EPIDEMIOLOGICAL ASPECTS OF THYROID DISEASES: frequency of goitre and of iodine deficiency; epidemiological evaluation of differential tumours of the thyroid. CELIAC DISEASE: immunological and genetic aspects; screening of populations with different risk levels. HELICOBACTER PYLORI INFECTION: role in functional dyspepsia, bacterial resistance in eradicating therapies; association with extradigestive pathologies. GASTROESOPHAGEAL REFLUX DISEASES: evaluation of acid and non-acid reflux by means of multichannel intraluminal impedentiometry combined with ph-metry; reevaluation of the role of histology in gastro-oesophageal reflux disease and correlation with impedentiometric data. SMALL INTESTINAL BACTERIAL OVERGROWTH (SIBO): validation of new non-invasive diagnostic methods; role in different digestive diseases, endocrine, autoimmune; study of SIBO in patients with irritable bowels. HCV-RELATED LIVER DISEASES AND LIVER FIBROGENESIS: clinical application of the 13C-breath test with different substrata and association with hepatocellular carcinoma and evaluation of the relative prognostic factors. REGULATION OF THE RECRUITMENT AND APOPTOSIS OF NEUTROPHILS AND MACROPHAGES: Physiopathology of the histological damage of phagocytes and its pharmaceutical control; mechanisms of tissue recruitment of neutrophils in chronic intestinal inflammation. APTOSIS CONTROL MECHANISMS OF MACROPHAGES OF RHEUMATOID ARTHRITIS. INFLAMMATION, AUTOIMMUNITY AND THE CARDIOVASCULAR APPARATUS: endothelium, innate and acquired immune cells and cardiocirculatory decompensation; atherosclerosis, immunity and inflammation., ANATOMICAL AND PHYSIOLOGICAL ASPECT OF THE STOMATOGNATHIC SYSTEM: morphological aspects of the different structures in relation to their function; anatomical dissection techniques of the cervicofacial structures; EPIDEMIOLOGICAL ASPECTS OF ORAL DISEASES: territorial evaluation of the frequency of oral disease; correlation with the general state of health and with specific systemic diseases.
Foreign languages	English
For further information please contact	Department contact professor: Prof. Marcello Bagnasco (Coordinator of the Course), tel. 010-3537979, e-mail: bagnasco@csita.unige.it Contact person in administration: Paolo Bava, tel. 010-3537542, e-mail: paolo.bava@unige.it

Doctoral School **School of Clinical Experimental Internal Medicine**
Disciplines involved: *Field 06 - Medical Sciences*
Director: Savarino Vincenzo
Access and attendance fees, second instalment: € 200,00

Course in: CLINICAL AND EXPERIMENTAL ONCOLOGY AND HAEMATOLOGY (CODE 4809)

Coordinator: Ballestrero Alberto	
Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche - DIMI)	
Places: 4 - Grants: 2 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 1 grant from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Human Health (study and treatment of tumours and degenerative diseases by means of new approaches based on the knowledge of the human genome)"	
Comparative assessment procedure	Exams (written test and interview)
Written test	7 November 2012, 9 a.m., in Room C (Aula C) of the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche - DIMI) (ground floor), viale Benedetto XV 6, 16132 Genova
Interview	7 November 2012, 3 p.m., in Room C (Aula C) of the Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche - DIMI) (ground floor), viale Benedetto XV 6, 16132 Genova
Exam syllabus	The written test will be on topics concerning oncology and haematology, focusing on aspects of pathophysiology and of molecular pathology subject-matter of the research themes. The interview will be a discussion of the written test and of the candidates' research field of interest, also on the basis of their curriculum vitae.
Research themes	Primary and secondary cancer prevention; molecular chemo-prevention; prognostic factors; molecular analysis of alterations present in transformed cells. Tumour pathology as the pathology of the molecular networks of control. Chronic myeloid leukaemia; apoptosis regulation in neoplastic haematological pathologies; pathogenesis of acute lymphocytic leukaemias; breast cancer; multiple myeloma. Innovative therapeutic approaches in the treatment of lymphoproliferative disorders and solid tumours; detection of signalling protein inhibitors and interaction with the world of "medicinal chemistry". Pre-clinical study of associations among new antineoplastic drugs. Pre-clinical and clinical experimentation in oncology.
Foreign languages	English
For further information please contact	Prof. Alberto Ballestrero (Coordinator) tel. 010-3538668, e-mail: aballestrero@unige.it Prof. Marco Gobbi, tel. 010-3538995, e-mail gobbi@unige.it Contact person in administration: Paolo Bava tel. 010-3537542, e-mail Paolo.Bava@unige.it

Doctoral School**School of new technologies for human and social sciences****Disciplines involved:**

Field 10 - Antiquities, Philological-Literary and Historical and Artistic Sciences, Field 01 - Mathematical and Computer Sciences, Field 09 - Industrial and Computer Engineering, Field 13 - Economic and Statistical Sciences

Director:

Poli Sergio

Access and attendance fees, second instalment: € 650,00

Course in: ARTS, PERFORMING ARTS AND MULTIMEDIA TECHNOLOGIES (CODE 4810)

Coordinator: Migliorini Maurizia	
Department of Italian and Romance languages, Classical Studies, Arts and Performing Arts (Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo - DIRAS)	
Places: 4 - Grants: 2 (*)	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 2 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	5 November 2012, 10 a.m. in the Aula Magna, Via Balbi 2, 16126 Genova
Interview	7 November 2012, 9:30 a.m., in the Aula Magna, Via Balbi 2, 16126 Genova
Exam syllabus	Development of an outline on the use of ICT in arts, music and performing arts.
Research themes	The evolution of computer science technology increasingly directed and dedicated to images opens a fundamental field of research for applications to visual arts, performing arts and cinematography. Online communication offers infinite opportunities for didactic and scientific intermediation by means of portals purposely constructed in which the figurative arts, performing arts and databases on the topic open new perspectives for innovative research methods, didactic communication and evaluation. In the same way the processing of fixed and moving images in the panorama of multimediality allows the creation of virtual containers (museums, theatre and film shows and exhibitions) so as to allow the ever increasing international spreading of works. Since our country is the most important centre for the study of history of art, traditional research, carried out with traditional historical and formal methods, it can, with the contribution of new technologies, take part in a new study and spreading model of the historical-artistic heritage, so as not to thwart our historical supremacy. Experimentation with robotics and with tridimensional and moving images also opens out to very promising research and applicative horizons in the field of museum and conservation standards, as the processing of images is fundamental for the in-depth analysis of specific themes of the history of figurative arts and their application and for the use of these new technologies in the world of the cinema and performing arts in general. The research on historical and artistic, theatrical and film texts finds widespread response with the new technologies and the application of the latter has allowed, already in other institutional and research situations, the creation of sites and portals and specific programs which are able not only to suggest the research of texts, museum routes, settings for shows, images, but to index and analyse them. Past and future research activities are thus: a. collaboration of graduate students with the Laboratorio per l'Analisi la Ricerca e la Tutela, le Tecnologie e l'Economia dei Beni Culturali, in particular with a group directed by prof. Sonia Maffei (lecturer of this doctoral course), University of Bergamo, and by the Scientific Committee of the LARTTE portal. b. The continuation of research activities carried out by F.o.S.C.A. (Fonti per la Storia della Critica d'arte – Sources for the History of Art Criticism) a portal created by the Genoese doctoral course and relating to Art Literature, Travel Literature, History of Art Criticism. The Fo.S.C.A website is the first linking base with the new agreement of the doctoral research with the work project of the Città Digitale (Digital City), in agreement with the Assessorato ai Saperi e all'Innovazione del Comune di Genova (the Local Government Department for Knowledge and Innovation of the Municipality of Genoa).
Foreign languages	English or French or Spanish
For further information please contact	Prof. Maurizia Migliorini, e-mail: migma@unige.it Tel 010-2099760. Person in administration: Maria Rosa Porcile, e-mail: MariaRosa.Porcile@lettere.unige.it Tel. 010- 2099806

Doctoral School

School of new technologies for human and social sciences

Disciplines involved:

Field 10 - Antiquities, Philological-Literary and Historical and Artistic Sciences, Field 01 - Mathematical and Computer Sciences, Field 09 - Industrial and Computer Engineering, Field 13 - Economic and Statistical Sciences

Director:

Poli Sergio

Access and attendance fees, second instalment: € 650,00

Course in: APPLIED ECONOMICS AND QUANTITATIVE METHODOLOGIES (CODE 4811)

Coordinator: Consigliere Isabella	
Department of Economics	
Places: 6 - Grants: 3 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 3 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	5 November 2012, 10 a.m., at the former Department of Economics and Quantitative Methods (Dipartimento di Economia e Metodi quantitativi - DIEM), Division of Political Economy, Faculty of Economics, Via Vivaldi 5, 16126 GENOVA.
Interview	6 November 2012, 11 a.m., at the former Department of Economics and Quantitative Methods (Dipartimento di Economia e Metodi quantitativi - DIEM), Division of Political Economy, Faculty of Economics, Via Vivaldi 5, 16126 GENOVA.
Exam syllabus	The written test will consist in an economic or financial and/or actuarial mathematics theme chosen by the candidates. Candidates are advised to concentrate their preparation on the following areas: - Microeconomics; - Macroeconomics; - Econometrics; - Financial and Actuarial Mathematics; As far as the interview is concerned please refer to the information in the Rules and Regulations of the Doctoral School.
Research themes	1) MODELS AND POLICIES FOR THE REGULATION OF "PUBLIC UTILITIES": forms for the introduction of competitive elements in the relative reference markets (SECS-P/01; SECS-P/02); network industries: analysis of economies of scale and of the prevalent market forms. Definition of appropriate antitrust policies (SECS-P/01; SECS-P/06). 2) COORDINATION PROBLEMS AMONG THE DIFFERENT WELFARE SYSTEMS IN THE EUROPEAN UNION COUNTRIES: repercussions of the social policies carried out by each country on the welfare of the other countries; effectiveness of social policies and competition in the EU (SECS-P/01; SECS-P/02); 3) ENTERPRISE INTERNATIONALISATION PROCESSES, towards advanced economies and towards emerging countries, with special reference to the countries on the southern coast of the Mediterranean (SECS-P/01; SECS-P/02); 4) HEALTH RESEARCH THEMES: individual and collective choices for the safeguarding of health; methods for the evaluation of the efficacy and equity in models of health protection (SECS-P/02); 5) ECONOMETRIC MODELS FOR THE MANAGEMENT OF PORTFOLIOS AND ANALYSIS OF THE FINANCIAL MARKETS (SECS-P/05).
Foreign languages	English or French
For further information please contact	Prof. Luca Beltrametti, tel. 010/2095211, e-mail: polist@economia.unige.it

Doctoral School**School of new technologies for human and social sciences****Disciplines involved:**

Field 10 - Antiquities, Philological-Literary and Historical and Artistic Sciences, Field 01 - Mathematical and Computer Sciences, Field 09 - Industrial and Computer Engineering, Field 13 - Economic and Statistical Sciences

Director:

Poli Sergio

Access and attendance fees, second instalment: € 650,00

Course in: PUBLIC ECONOMY AND FINANCE (CODE 4812)

Coordinator: Gandullia Luca	
Department of Political Sciences (Dipartimento di Scienze Politiche - DISPO)	
Places: 4 - Grants: 2 (*).	
(*) 2 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	8 November 2012, 9:30 a.m., at the Department of Political Sciences (Dipartimento di Scienze Politiche - DISPO) Largo Zecca 8/14 - 16124 Genova
Interview	9 November 2012, 9:30 a.m., at the Department of Political Sciences (Dipartimento di Scienze Politiche - DISPO) Largo Zecca 8/14 - 16124 Genova
Exam syllabus	A paper and an interview
Research themes	- Public economy and finance - Political economy - Economy and finance of European Union - Political economy
Foreign languages	English or French
For further information please contact	Prof. Luca Gandullia – Coordinator of the Doctoral Course – c/o il Department of Political Sciences (Dipartimento di Scienze Politiche - DISPO) Largo Zecca 8/14 tel. 010 209 9079 e-mail: luca.gandullia@unige.it

Doctoral School**School of new technologies for human and social sciences****Disciplines involved:**

Field 10 - Antiquities, Philological-Literary and Historical and Artistic Sciences, Field 01 - Mathematical and Computer Sciences, Field 09 - Industrial and Computer Engineering, Field 13 - Economic and Statistical Sciences

Director:

Poli Sergio

Access and attendance fees, second instalment: € 650,00

Course in: LANGUAGES, CULTURES AND ICT TECHNOLOGIES (CODE 4813)

Coordinator: Poli Sergio	
Dipartimento di Lingue e culture moderne	
Places: 4 - Grants: 2 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 2 grants from the University	
Comparative assessment procedure	Qualifications/Publications and Exams (qualifications/publications, written test and an interview)
Written test	6 November 2012, ore 09:30, at the Department of Modern Languages and Cultures (Dipartimento di Lingue e Culture Moderne), Aula (Room) KOCH, p.zza. S. Sabina 2A. 16124 Genova
Interview	8 November 2012, alle ore 09:30, at the Department of Modern Languages and Cultures (Dipartimento di Lingue e Culture Moderne), Aula (Room) I, p.zza. S. Sabina 2A. 16124 Genova
Exam syllabus	Written test: the titles of the written papers will be chosen by the candidate from a series of three subjects assigned, 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. Interview: a discussion of the candidates' curriculum, of experiences consistent with the doctoral fields of research and of the research projects.
Research themes	1. Application of information and communication technologies to languages (distance teaching of languages; research in the linguistic and literary fields; design and development of multimedia and network products, etc.); 2. Application of information and communication technologies to literature and culture (creation of research instruments; construction of specific databases; design and development of multimedia and network products at both scientific and popular levels, etc.); 3. Critical reflection on the impact of information and communication technologies on learning paradigms and on public and social structures, on teaching methodologies and on learning and use protocols.
Further information on how to present qualifications/publications	Candidates may submit their documentation not only in Italian and English, but also in French, German and Spanish.
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: sergio.poli@lingue.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 German or Spanish, or Swedish or Arabic.
For further information please contact	Luisa ZITO Tel. 010.2099575 e-mail: zito@balbi.unige.it

Doctoral School School of Biomedical Sciences and Technologies
Disciplines involved: Field 06 - Medical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences
 Director: Ravazzolo Roberto
 Access and attendance fees, second instalment: € 200,00

Course in: EPIDEMIOLOGY AND PREVENTION
Specialization: MOLECULAR EPIDEMIOLOGY OF CHRONIC DEGENERATIVE DISEASES AND BIO-STATISTICS
(CODE 4814)

Coordinator: De Flora Silvio	
Department of Health Sciences (Dipartimento di Scienze della Salute - DISSAL)	
Places: 2 - Grants: 1 (*).	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Human Health (study and treatment of tumours and degenerative diseases by means of new approaches based on the knowledge of the human genome)"	
Comparative assessment procedure	Qualifications/Publications and Exams (qualifications/publications, written test and an interview)
Written test	6 November 2012, 9 a.m., in the Library of the the Department of Health Sciences (Dipartimento di Scienze della Salute - DISSAL), Via Pastore 1, 16132 Genova
Interview	6 November 2012, 11 .am., in the Library of the the Department of Health Sciences (Dipartimento di Scienze della Salute - DISSAL), Via Pastore 1, 16132 Genova
Exam syllabus	The tests will be on the following research themes: Molecular epidemiology of chronic degenerative diseases and biostatistics.
Research themes	- Study of the disease risk factors and prevention of their action - Molecular epidemiology techniques and bio-monitoring. - Planning and carrying out of controlled clinical experimentation and pharmacological surveillance.
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. Silvio De Flora, Dipartimento di Scienze della Salute (DISSAL), Via Pastore 1, 16132 Genova. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English
For further information please contact	Dott.ssa Cristina Cartiglia Dipartimento di Scienze della Salute (DISSAL), tel 010.3538509, e-mail: c.cartiglia@unige.it

Doctoral School School of Biomedical Sciences and Technologies
Disciplines involved: Field 06 - Medical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences
 Director: Ravazzolo Roberto
 Access and attendance fees, second instalment: € 200,00

Course in: EPIDEMIOLOGY AND PREVENTION
Specialization: VACCINAL PREVENTION (CODE 4815)
Associated Universities: University of Ferrara

Coordinator: De Flora Silvio	
Department of Health Sciences (Dipartimento di Scienze della Salute - DISSAL)	
Places: 2 - Grants: 1 (*).	
(*) 1 grant from the University	
Comparative assessment procedure	Qualifications/Publications and Exams (qualifications/publications, written test and an interview)
Written test	6 November 2012, 9 a.m., in the Library of the the Department of Health Sciences (Dipartimento di Scienze della Salute - DISSAL), Via Pastore 1, 16132 Genova
Interview	6 November 2012, 11 a.m., in the Library of the the Department of Health Sciences (Dipartimento di Scienze della Salute - DISSAL), Via Pastore 1, 16132 Genova
Exam syllabus	The tests will be on the following research themes: Vaccinal prevention.
Research themes	- Epidemiology of transmissible vaccine-preventable and non vaccine-preventable diseases; - Immunological response to vaccinal preparations; - Role of vaccinations in children and adolescents, adults and the elderly; - Regulating and authoritative aspects of vaccines.
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. Silvio De Flora, Dipartimento di Scienze della Salute (DISSAL), Via Pastore 1, 16132 Genova. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English
For further information please contact	Dott.ssa Cristina Cartiglia Dipartimento di Scienze della Salute (DISSAL), tel 010.3538509, e-mail: c.cartiglia@unige.it

Doctoral School **School of Biomedical Sciences and Technologies**
Disciplines involved: Field 06 - Medical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences
 Director: Ravazzolo Roberto
 Access and attendance fees, second instalment: € 200,00

Course in: GENETICS
Specialization: THE CLINICAL, GENETIC AND IMMUNOLOGICAL STUDY OF CHILDHOOD AND YOUTH DISEASES (CODE 4816)

Coordinator: Ravazzolo Roberto	
Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili - DINOGMI)	
Places: 4 - Grants: 2 (*). (*) 2 grants from the University	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	8 November 2012, at 2 p.m., Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili - DINOGMI), former DIPE of the University of Genova – Largo G. Gaslini 5 – 16147 Genova
Exam syllabus	Contents of the interview: - previous research experience, including research carried out for the degree dissertation; - ideas for projects; - knowledge of basic methodologies for clinical and laboratory research; - ITC knowledge; - knowledge of English.
Research themes	SPECIALIZATION THE CLINICAL, GENETIC AND IMMUNOLOGICAL STUDY OF CHILDHOOD AND YOUTH DISEASES - This Doctoral Research Course will concern the main topics of clinical research in paediatrics, Human Genetics and Immunology included in the following lines of research: - Molecular bases of genetic diseases – Genetic epidemiology – Immunogenetics – Tumour Genetics – the Genetics of complex diseases – Cytogenetics – Clinical Genetics – Genetic analysis in patients with diabetes type I and with Maturity-onset diabetes of the young (MODY) – Pathogenesis and clinic of rheumatic diseases – Evaluation of the efficacy of therapy in rheumatic diseases – Self-inflammatory disease – Immunoregulatory role of HLA soluble molecules – Immunoregulatory mechanisms in diabetes type 1 – Defence mechanisms from infections – Molecular bases of neuromuscular diseases – Molecular bases of idiopathic epilepsies – Molecular bases of congenital errors of the metabolism – Biochemistry of metabolic diseases – Physiopathology and Clinic of endocrine pathologies in children and adolescents – Treatment and prevention of obesity – Foetal bone development – Clinical neuropsychology in paediatrics.
Further information on how to present qualifications/publications	Candidates are required to present the title of their dissertation and a synthetic description of its contents, as well as a list of the examinations sat and the relative marks. Candidates may also submit their applications and documentation in English.
Information on references	No reference letters are required since they will not be taken into account for the score.
Foreign languages	English (reading and translation of a text)
For further information please contact	Prof. Roberto Ravazzolo tel. 010-5636400 e-mail: rravazzo@unige.it Contact person in administration: Mrs Rosanna Rizzo tel. 010-353.8037 e-mail: rosanna.rizzo@unige.it

Doctoral School **School of Biomedical Sciences and Technologies**
Disciplines involved: Field 06 - Medical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences
 Director: Ravazzolo Roberto
 Access and attendance fees, second instalment: € 200,00

Course in: GENETICS
Specialization: ONCOLOGICAL GENETICS AND BIOLOGY OF DIFFERENTIATION (CODE 4817)

Coordinator: Ravazzolo Roberto	
Department of Neurosciences, rehabilitation, ophthalmology, genetics and mother and child sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili - DINOEMI)	
Places: 2 - Grants: 1 (*).	
(*) 1 grant from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	13 November 2012, 9 a.m., in Room C (Aula C) of the Department of Internal Medicine and Medical Specialties (Dipartimento di Medicina interna e Specialità mediche - DIMI) , Viale Benedetto XV 6, 16132 Genova
Interview	13 November 2012, 2 p.m. in Room C (Aula C) of the Department of Internal Medicine and Medical Specialties (Dipartimento di Medicina interna e Specialità mediche - DIMI) , Viale Benedetto XV 6, 16132 Genova
Exam syllabus	- General mechanisms of tumour genesis; - Control of cell proliferation; - Genes involved in cellular differentiation; - Models of cellular differentiation response in marine invertebrates and mammal cellular lines.
Research themes	Field of research area which involves the study of the genes responsible for the balance between proliferation, differentiation and cellular death. In particular: 1) Genesis of specific types of Malignant neoplasias: melanoma, pancreatic carcinoma, neurofibroma, basocellular carcinoma, diffuse gastric cancer, gastrostromal tumours (GIST), differentiated thyroid carcinoma, multiple endocrine neoplasias, colon tumours of hamartomatous origin, benign, dysplastic nevus, adenomas. 2) Determination of genes involved in the onset, progression and metastasis phase of neoplasia. Studies at tissue and somatic level for the development of "multi-hit" models and clonal selection. In particular evaluation of action mechanisms of TSGs alternative to the loss of heterozygosity (negative dominance). 3) Evaluation of individual and/or family predisposition to tumours. Studies on high and low penetrance susceptibility genes and new models to calculate the risk. 4) Determination of new genes responsible for known hereditary tumour syndromes and of non-known genes for the definition of new hereditary tumour syndromes (ex. the SUFU gene for Gorlin syndrome, pigmentation genes for the dysplastic nevus syndrome). 5) Development of new methodologies for cellular, genetic and cytogenetic molecular biology, cell transfections to define the pathogenicity of molecular alterations present in the areas not codified by the action regulation gene of genic expression. 6) Osteogenesis. Study of the correlation genotype/phenotype in gene candidates (systems of transgenic mice and knock out) also using tridimensional cultures and the response systemic and exogenous substances. 7) Chondrogenesis. Production of murine models of rare genetic diseases to identify events responsible for the altered development of the skeleton: chondrodystrophies, defects in the closing of the neural tube. 8) Study of the regulation of molecular mechanisms involved in the production of extracellular matrix using marine invertebrates as study models.
Foreign languages	English (reading and translation of a text)
For further information please contact	Prof.ssa Giovanna Bianchi Scarrà tel 010.3537977/7543 e-mail: vanceci@unige.it

Doctoral School **School of Biomedical Sciences and Technologies**
Disciplines involved: Field 06 - Medical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences
 Director: Ravazzolo Roberto
 Access and attendance fees, second instalment: € 200,00

Course in: CLINICAL AND EXPERIMENTAL IMMUNOLOGY (CODE 4818)

Coordinator: Mingari Maria Cristina	
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES)	
Places: 4 - Grants: 2 (*).	
(*) 1 grant from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Human Health (study and treatment of tumours and degenerative diseases by means of new approaches based on the knowledge of the human genome)"	
Comparative assessment procedure	Qualifications/Publications and Exams (qualifications/publications, written test and an interview)
Written test	13 November 2012, 9 a.m. in the meeting room of the Excellence Centre for the research and study of molecular communication mechanisms between cells: from basic research to the clinic (CEBR), first floor, Viale Benedetto XV 7, 16132 Genova
Interview	13 November 2012, 2 p.m., in the meeting room of the Excellence Centre for the research and study of molecular communication mechanisms between cells: from basic research to the clinic (CEBR), first floor, Viale Benedetto XV 7, 16132 Genova
Exam syllabus	The written test will consist in a paper on topics dealt with in the doctoral course (Clinical and Experimental Immunology). The interview will concern the same topics and also a discussion of the research project presented by the candidate and of his/her research field of interest, also on the basis of previous work stated in his/her curriculum vitae et studiorum. English knowledge will be tested with the reading and translation of a passage from a scientific article.
Research themes	The main research themes subject-matter of the Doctoral entry tests will concern the following thematic: 1) Function and structure of immunocompetent cells with particular regard Natural Killer cells (NK), Dendritic cells (DC) and regulatory T-lymphocytes. 2) Molecular and cellular physiopathology of immune responses with particular regard to the study of the receptors involved in activation and inhibition mechanisms of immunocompetent cells and the role of adhesion molecules in inflammatory pathology. Study of communication mechanisms among cells that involve membrane receptors and their counterparts (ligands) expressed on the surface of other cells. 3) Topics concerning Clinic Immunology and Allergology with special regard to Autoimmunity, hereditary and acquired Immunodeficiencies and to tumour Immunology. By studying these themes the graduate student will learn to transfer the scientific learning of basic immunology from the laboratory to the patient's bedside, thus accomplishing a training process concerning the methods of application and development of translational medicine.
Information on references	Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: Segreteria Amministrativa del CEBR k.a. Dott.ssa Daniela Gatti Viale Benedetto XV, 7 - 16132 Genova Tel.0103533024 E-mail: daniela.gatti@unige.it The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English
For further information please contact	Dott.ssa Daniela Gatti Viale Benedetto XV, 7 16132 Genova Tel.0103533024 E-mail: daniela.gatti@unige.it

Doctoral School **School of Biomedical Sciences and Technologies**
Disciplines involved: Field 06 - Medical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences
 Director: Ravazzolo Roberto
 Access and attendance fees, second instalment: € 200,00

Course in: MANAGEMENT DEL TRAPIANTO D'ORGANO E TESSUTO, INNOVAZIONI CHIRURGICHE GENERALI E SPECIALISTICHE AVANZATE, DIAGNOSI MICROBIOLOGICA E TERAPIA DELLE INFEZIONI (CODE 4819)

Coordinator: Valente Umberto	
Department of integrated surgical and diagnostic sciences (Dipartimento di scienze chirurgiche e diagnostiche integrate - DISC)	
Places: 4 - Grants: 2 (*).	
(*) 2 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	7 November 2012, 2 p.m., in the Didactic Room (Aula Didattica), Transplant Division of the Department of integrated surgical and diagnostic sciences (Dipartimento di scienze chirurgiche e diagnostiche integrate - DISC), Ospedale San Martino Monoblocco 4th floor, Largo R.Benzi, 10 – 16132 Genova
Interview	7 November 2012, 4 p.m., in the Didactic Room (Aula Didattica), Transplant Division of the Department of integrated surgical and diagnostic sciences (Dipartimento di scienze chirurgiche e diagnostiche integrate - DISC), Ospedale San Martino Monoblocco 4th floor, Largo R.Benzi, 10 – 16132 Genova
Exam syllabus	The tests will concern the research themes (general and specialist surgery, organ transplants, microbiologic diagnosis, infection therapy). The interview will consist in the illustration of the candidates' field of interest research activities, also on the basis of previous activities stated in their curriculum vitae. Specific experience relating to the research themes will be taken into consideration.
Research themes	General surgical and advanced specialist innovations in liver transplants in the adult and paediatric patient (thanks to the introduction at national level carried out by the U.O.C. of the hepatic dividing technique by means of in situ "splitting"), kidney transplants in the various typologies (single kidney in adult receiver, paediatric kidney, two kidneys from a marginal donor, kidney from a living donor), isolated pancreas transplants, associated transplants (kidney-pancreas, kidney-liver), multivisceral transplants (kidney-pancreas-liver). Technical and organisational aspects of transplants and of the safety of the organisation and the ICT network; treatment and follow-up of hepatobiliopancreatic oncologic pathologies, advanced videolaparoscopic surgery to more modern programmes for the prevention and treatment of complications in diabetes and in tumours de novo in the organ transplant. Innovative conservation techniques for organs and tissues, surgical and anaesthesiological procedures, reject management, diagnosis, prophylaxis and therapy of infective complications, development of powerful immunosuppressive agents used for the prevention and control of rejections, prevention and treatment of microbe infections.
Foreign languages	English or French
For further information please contact	Coordinator of the Course: Prof. Umberto Valente, tel. 010-5553108 fax. 010-503965, umberto.valente@hsanmartino.it Department secretarial office: Dr. Roberto Giacomini' Tel. (+39) 010209 – 9317 / (+39) 010353 - 7462 (DISC) Fax: (+39) 010209 - 9326 E-mail: Roberto.Giacomini@unige.it Mrs Marina Caldano, DISC, Sezione Trapianti , Largo R.Benzi, 8 –16132 Genova E-mail: marina.caldano@hsanmartino.liguria.it

Doctoral School **School of Biomedical Sciences and Technologies**
Disciplines involved: Field 06 - Medical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences
 Director: Ravazzolo Roberto
 Access and attendance fees, second instalment: € 200,00

Course in: REGENERATIVE MEDICINE AND TISSUE ENGINEERING (CODE 4820)

Coordinator: Cancedda Ranieri Maria	
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale - DIMES)	
Places: 4 - Grants: 2 (*)	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 2 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	5 November 2012, 9 a.m., Didactic Room (Aula Didattica) (Torre C – 3rd Floor) – Advanced Biotechnologies Centre (Centro di Biotecnologie Avanzate) – L.go R. Benzi n. 10 – 16132 Genova
Interview	5 November 2012, 2 p.m., Didactic Room (Aula Didattica) (Torre C – 3rd Floor) – Advanced Biotechnologies Centre (Centro di Biotecnologie Avanzate) – L.go R. Benzi n. 10 – 16132 Genova
Exam syllabus	A written paper presenting a research proposal and an interview to ascertain candidates' scientific knowledge and aptitude skills. During the interview candidates shall also discuss their research proposal with the examining commission. English knowledge required. If compatible with the rules and regulations in force at the time of the public exam, foreign candidates who live abroad may present their paper and research presentation to the examining commission electronically and the interview may also be done via teleconference.
Research themes	REGENERATIVE MEDICINE studies how to repair and regenerate tissues and organs using the natural components and signals of an organism (stem cells, growth factors, etc.). Specific areas of interest are: - cellular therapy - tissue engineering - development of biocompatible biomaterials, biodegradable and capable of integrating molecules and cells - delivery of growth factors, cytokines and other pharmacologically active molecules - immunology and biology of transplants - immunotherapy - gene therapy. By exploiting the knowledge of modern biology, there have been developments in methodologies that use growth factors and stem/progenitor cells which allow the regeneration of tissues that have been seriously damaged. The association of cells obtained "ex vivo", and/or biologically active molecules with different materials has led to the production of a new generation of transplantable biomaterials (TISSUE ENGINEERING) which can be obtained and used in non limitative quantities. The first tissues reconstructed "in vitro" and used for human therapy are those of the epidermis and other stratified epithelia. Other examples concern the reconstruction of cartilage, of bone and of the skeleton and cardiac muscular tissues, the transplant of specific endocrine cells, the culture of endothelial cells to line vascular prosthesis, the in vitro expansion of cells with neuroregenerative potential. Cells cultured "ex vivo" are also used for the engineering of "hybrid artificial organs" such as "artificial" kidneys, livers and pancreas. The potential of tissues reconstructed "in vitro" for genic therapy should also be remembered. As a matter of fact tissue can be reconstructed starting from the patient's or donor's cells after they have been genetically modified, prior to expansion in culture, by the insertion of a new copy of a gene in their genome to replace the missing or muted one.
Foreign languages	English (foreigners must show their knowledge of Italian)
For further information please contact	Coordinator of the Doctoral Course: Prof. Ranieri Cancedda Dipartimento di Medicina Sperimentale (Department of Experimental Medicine) Tel. 0105737391 Fax 0105737257 e-mail: ranieri.cancedda@unige.it Organising Secretarial Office: Enrico Zeraschi Dipartimento di Medicina Sperimentale (Department of Experimental Medicine) Tel. 0105737266 Fax 0105737216 e-mail: enrico.zeraschi@unige.it

Doctoral School School of Biomedical Sciences and Technologies
Disciplines involved: Field 06 - Medical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences
 Director: Ravazzolo Roberto
 Access and attendance fees, second instalment: € 200,00

Course in: RESEARCH METHODOLOGY IN NURSING SCIENCES (CODE 4821)

Coordinator: Sasso Loredana	
Department of Health Sciences (Dipartimento di Scienze della Salute - DISSAL)	
Places: 4 - Grants: 3 (*).	
(*) 2 from the University	
(*) 1 grant financed by the Department of Health Sciences (Dipartimento di Scienze della Salute - DISSAL)	
Comparative assessment procedure	Qualifications/Publications and Exams (qualifications/publications, written test and an interview)
Written test	13 November 2012, 9 a.m., in the Department of Health Sciences (Dipartimento di Scienze della Salute - DISSAL), Via A. Pastore 1, 16132 Genova
Interview	13 November 2012, 11 a.m., in the Department of Health Sciences (Dipartimento di Scienze della Salute - DISSAL), Via A. Pastore 1, 16132 Genova
Exam syllabus	The candidate must plan and comment a research protocol.
Research themes	Patient safety, sensitive outcomes of nursing care. Innovative training models and methodologies.
Further information on how to present qualifications/publications	When presenting qualifications/publications please state if there has been any previous work experience linked to the research activity and scientific activity in the nursing field, specifying, in detail, the quality, originality and flexibility of the research project carried out in this previous experience.
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.ssa Loredana Sasso, Dipartimento di Scienza della Salute Via A. Pastore 1, 16132 Genova. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English (a good level of knowledge of English is crucial)
For further information please contact	Prof.ssa Loredana Sasso, Dipartimento di Scienza della Salute, Via A. Pastore 1, 16132 Genova. Tel. 010 353/8513 E-mail: l.sasso@unige.it

Doctoral School **School of Biomedical Sciences and Technologies**
Disciplines involved: Field 06 - Medical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences
 Director: Ravazzolo Roberto
 Access and attendance fees, second instalment: € 200,00

Course in: NEUROSCIENCES (CODE 4822)

Coordinator: Mancardi Giovanni Luigi	
Department of Neurosciences, Rehabilitation, Ophthalmology, Genetics and Mother and Child Sciences (Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili - DINOGMI)	
Places: 4 - Grants: 2 (*).	
(*) 1 grant from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Human Health (study and treatment of tumours and degenerative diseases by means of new approaches based on the knowledge of the human genome)"	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	7 November 2012, 9 a.m., in the Aula Magna of the Neurological Clinic (Clinica Neurologica) of the Department of Neurosciences, Rehabilitation, Ophthalmology, Genetics and Mother and Child Sciences (Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili - DINOGMI), Largo Paolo Daneo 3, 16132 Genova
Exam syllabus	Description of the research project the candidates intend to develop during the doctoral course.
Research themes	a) Neurology: multiple sclerosis; hereditary peripheral neuropathies and immunomediated neuropathies, degenerative diseases of the central nervous system, dementias, epilepsy, cerebrovascular diseases, extrapyramidal diseases and Parkinson's disease. b) Psychiatry: affective disorders, compulsive obsessive disorder, schizophrenia and manic-depressive psychosis. Research is primarily aimed at studying the variability in the response to drugs. c) Neurogenetics: hereditary peripheral neuropathies, cerebellar ataxias, Huntington's disease, taupathies, type 1 neurofibromatosis. d) Developmental neurology: epilepsy, child cerebral palsy, mental retardation, extrapyramidal diseases, autism, neuromuscular diseases. e) Neuroimages: with the NMR Research Centre available for the study of diseases of the nervous system conventional, functional and spectroscopic NMR methodologies will be developed. f) Cellular and Molecular Neurophysiopathology - Cellular and molecular mechanisms of synaptic transmission and plasticity; Molecular effects of the neurotrophins on synaptic transmission and synaptogenesis; Generation and study of engineered circuits of cultured neurons on artificial substrates; Characteristics of the GABAA receptors of cerebellar granule cells; Activity of synthetic molecules on NK1 receptors and on serotonin transporters; Role of chemokines in the physiology of neural stem cells and in the oncogenesis of brain tumours. g) Sleep Physiopathology - Application of macro and micro-structural mathematical models of the internal organisation of sleep to the study of dyssomnia and hypersomnia; Chrono-biology of the regulation of the sleep-waking cycle in relation to road safety and to shift workers; Role of neural mechanisms involved in the regulation of sleep in the epileptogenesis process. h) Pathogenesis of Neurodegenerative Diseases i) Physiopathology of Movement.
Further information on how to present qualifications/publications	The following qualifications will be evaluated: a) Degree mark b) Exam marks c) Degree dissertation d) Acknowledgements and prizes e) Reference letters f) Work experience g) Publications, posters and conferences
	Candidates must present three reference letters to support their candidature, of which one must be by a professor of their University. 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. Giovanni Luigi Mancardi Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOGMI), Università di Genova Largo Paolo Daneo 3, 16132 Genova The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English
For further information please contact	Prof. Giovanni Luigi Mancardi Coordinator of the Doctoral Course in Neurosciences Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOGMI) Tel. 010 353 7030 – 7040; Fax 010 353 8631; E-mail: glmancardi@neurologia.unige.it

Doctoral School School of Biomedical Sciences and Technologies
Disciplines involved: Field 06 - Medical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences
 Director: Ravazzolo Roberto
 Access and attendance fees, second instalment: € 200,00

Course in: MOTORY AND SPORTS ACTIVITIES SCIENCES (CODE 4823)

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: 4 - Grants: 2 (*).	
(*) 2 grants from the University	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	6 November 2012, at 10 a.m. in the Library of the Human Physiology Section of the Department of Experimental Medicine (Sezione di Fisiologia Umana del Dipartimento di Medicina Sperimentale - DIMES), Viale Benedetto XV, 3 – 16132 Genova
Exam syllabus	The interview will concern the candidates' research project, which will be evaluated on the basis of content originality, execution modalities, feasibility, in relation to the themes of the field of research for which this public exam has been announced.
Research themes	The doctoral course will develop research lines concerning the study of: 1. motory performance, motory learning and sensorimotor integration (the kinematics of movement, postural analysis, electrophysiology of movement and of sensorimotor integration, morphologic and functional imaging; 2. sports performance (the methodological approach to sports performance, the interaction between physiological parameters and training methods, the relationship between nutrition and sports performance, the interaction between drugs and the physiology of athletic gestures.
Further information on how to present qualifications/publications	The following will be evaluated: 1. Degree mark; 2. Personal curriculum (including the Degree dissertation); 3. Research experience and scientific publications; 4. Research project presented by the candidate.
Information on references	Candidates must present three reference letters to support their candidature, of which one must be by a professor of their University. 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. Giovanni Abbruzzese Coordinator of the Doctoral Course in Scienze delle Attività Motorie e Sportive Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOGMI) Università di Genova Tel. 010-3537039 Fax 010-3538631 E-mail: gabbruzzese@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
For further information please contact	Prof. Giovanni Abbruzzese (Coordinator of the Doctoral Course) in Scienze delle Attività Motorie e Sportive Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOGMI) Tel. 010-3537039 Fax 010-3538631 E-mail: gabbruzzese@neurologia.unige.it

Doctoral School School of Chemistry and Materials Sciences and Technologies
Disciplines involved: Field 03 - Chemical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences, Field 06 - Medical Sciences, Field 09 - Industrial and Computer Engineering,
 Director: Saccone Adriana
 Access and attendance fees, second instalment: € 250,00

Course in: SCIENCE AND TECHNOLOGY OF MATERIALS (CODE 4824)

Coordinator: Canepa Maurizio	
Department of Physics (Dipartimento di Fisica - DIFI)	
Places: 6 - Grants: 3 (*)	
(*) 3 grants from the University	
Comparative assessment procedure	Qualifications/Publications and Interview
Date of interview:	8 November 2012, 9 a.m. in the Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale - DCCI), via Dodecaneso 31 - 16146 Genova Candidates who live more than 150 km away from Genoa and foreign candidates 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 31/10/2012 by means of an email to the address of the Coordinator of the Course: canepa@fisica.unige.it
Research themes	The research lines are focused on the experimental investigation and analysis of the modelling of metallic materials, alloys, oxides, ceramic, polymeric, composite, biomolecular and biocompatible materials. Correlations between methods of production (synthesis, 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, storage materials and the production 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.).
Further information on how to present qualifications/publications	Qualifications/publications (degree, masters, post-university qualification courses, publications in international journals, patents, study or research prizes) to be certified copies true to the original. In particular all candidates must attach the certificates relative to all their study qualifications at university level, with the corresponding marks, and specify the duration of the study cycles to their application. Foreign candidates must clearly state the number of years which correspond to each study cycle carried out previous to University enrolment.
Information on references	Candidates must present a minimum of one to a maximum of three reference letters by university professors or recognized experts in the field. These referees must be of the research themes of the doctoral course 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: Dipartimento di Fisica, Università di Genova, Via Dodecaneso 33, 16146 Genova (Italia). The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages:	English
For further information please contact	Prof. Maurizio Canepa, Dipartimento di Fisica, tel. +39/010/3536242, e-mail: canepa@fisica.unige.it

Doctoral School**School of Chemistry and Materials Sciences and Technologies****Disciplines involved:**

Field 03 - Chemical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences, Field 06 - Medical Sciences, Field 09 - Industrial and Computer Engineering,

Director:

Saccone Adriana

Access and attendance fees, second instalment: € 250,00

Course in: CHEMICAL SCIENCES AND TECHNOLOGIES (CODE 4825)

Coordinator: Saccone Adriana	
Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale - DCCI)	
Places: 8 - Grants: 4 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 3 grants from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Enhancement of the typical products of agricultural foodstuff and food safety by means of new systems concerning characteristics and quality guarantees"	
Comparative assessment procedure	Qualifications/Publications
Research themes	Chemistry and Physical Chemistry of photoactive materials / New materials for magnetic refrigeration and heat pumps / Nanoparticles for technological applications / Intermetallics of rare clays and actinides as new materials for technological applications / Synthesis and study of crystal-chemical, thermal, magnetic properties and transport of oxides, nitrides and carbides / Quantum Mechanics of Interacting Molecular Systems / Determination of chemical species of environmental and oceanographic interest / Development of chromatographic innovative methodologies coupled with mass spectrometry / Analytical methodologies for speciation studies of trace elements / Analytical studies concerning the employment of techniques of atomic spectrometry / Mechanisms and catalysis, also supramolecular, in "Acyl Transfer" processes / Chemical and enzymatic synthesis of biologically active compounds / Synthesis and reactivity of heterocyclic compounds / New benzofurazanic derivatives of analytical, chemical and clinical interest / Stereoelectronic properties of organic compounds / Phase equilibria and thermodynamics of metallic materials: experimental and theoretical aspects / Materials for the production, storage and combustion of hydrogen / Metallurgy of metals and of ferrous alloys and non-ferrous alloys / Metallurgical processes / Control and optimization of processes / Multiphase and multicomponent polymeric materials / New polymeric materials for reactive blending / New nanocompounds and hybrids of polymeric matrix / Polymeric nanostructures for photonics / Polymeric nano fibres / Solidification of semicrystalline polymers in industrial conditions / Preparation and applications of heterogeneous catalysts / Study of membranes and membrane processes / Chemistry for the preservation of the cultural heritage / Food quality control / Chemistry didactics.
Further information on how to present qualifications/publications	<p>Qualifications that will be evaluated:</p> <ul style="list-style-type: none"> - degree and degree mark - reference letters (not more than three) - research project - curriculum - other qualifications/publications (masters, post-university qualification courses, publications in international journals, presentations in conferences, patents, study or research prizes). <p>All candidates must attach the certificates relative to all their study qualifications at university level, with the corresponding marks, and specify the duration of the study cycles to their application in copies true to the original. Foreign candidates must clearly state the number of years which correspond to each study cycle carried out previous to University enrolment.</p>
Information on references	Candidates must present a minimum of one to a maximum of three reference letters by university professors or experts of the subject-matter. These referees must send their reference letters within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following e-mail address adriana.saccone@unige.it . The name, status and service place of the referees chosen by the candidates must be stated in their applications.
For further information please contact	Prof.ssa Adriana Saccone, Dipartimento di Chimica e Chimica Industriale Tel. +39/010/3536154 - 6161 e-mail: adriana.saccone@unige.it

Doctoral School

School of Chemistry and Materials Sciences and Technologies

Disciplines involved:

Field 03 - Chemical Sciences, Field 02 - Physical Sciences, Field 05 - Biological Sciences, Field 06 - Medical Sciences, Field 09 - Industrial and Computer Engineering,

Director:

Saccone Adriana

Access and attendance fees, second instalment: € 250,00

Course in: PHARMACEUTICAL, NUTRITIONAL AND COSMETIC SCIENCES (CODE 4826)

Coordinator: Balbi Alessandro	
Department of Pharmacy (Dipartimento di Farmacia - DIFAR)	
Places: 8 - Grants: 4 (*).	
(*) 4 grants from the University	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	8 November 2012, 9:30 a.m. at the Department of Pharmacy (Dipartimento di Farmacia - DIFAR) (rooms of former DISCIFAR), viale Benedetto XV, 3 - 16132 Genova
Exam syllabus	Basic knowledge of Pharmaceutical and Toxicological Chemistry, Chemiometry, Organic and Macromolecular Chemistry, Phytochemistry, Pharmacognosy, Pharmaceutical Technology, the Chemistry of Cosmetic Products, Foods Chemistry and Chemistry of diet products; discussion of degree dissertation and the research themes proposed.
Research themes	1) Study of active principles of natural origin and their structural modifications. 2) Design, targeted synthesis and evaluation of the biologic activity of compounds of potential therapeutic interest such as antineoplastic and antiviral drugs. 3) Rational design and synthesis of new phosphodiesterase inhibitors as potential therapeutic agents in neurodegenerative and cardiovascular diseases. 4) Design, synthesis and evaluation of the biological activity of new selective PDE 4 inhibitors for the treatment of neurodegenerative pathologies. 5) Advanced computational methodological applications for the study of the ligando-receptor and ligando-enzyme interaction at molecular level. 6) Food and diet food safety: singling out of beneficial and harmful substances. 7) Micro and nanostructured functional copolymers of biochemical and pharmaceutical interest, and innovative reactive polymers for supported organic synthesis and combinatorial chemistry aimed at finding new bioactive principles 8) Bioadhesive pharmaceutical forms, colloidal systems for the release and direction of pharmaceuticals. Maintenance and perfecting of PARVUS executable modules. 9) Development of chemometric methods and applications. Multivariate calibration for spectrometry, electronic nose and tongue. Experimental design. 10) Search for biologically active phytoconstituents. 11) Study of biogeochemical cycles of trace elements: presence, distribution and bioaccumulation in living organisms; effects on the food chain. 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. 14) Preparation of alternative models to animal experiments for the evaluation of natural and synthetic chemical compounds, in pharmaceutical, cosmetic and nutritional fields.
Information on references	Reference letters will not be taken into account for the score.
Foreign languages	Italian candidates must show their knowledge of English during the interview: foreign candidates must show their knowledge of Italian and English.
For further information please contact	Department administration contact person for further information: Mr Aldo Merlani (email: aldo.merlani@unige.it , Telef. 010 3538357).

Doctoral School **School of Science and Technology for the Environment and Territory**
Disciplines involved: Field 04 - Earth Sciences, Field 05 - Biological Sciences
 Director: Firpo Marco
 Access and attendance fees, second instalment: € 250,00

Course in: BOTANY APPLIED TO AGRICULTURE AND THE ENVIRONMENT (CODE 4827)

Coordinator: Mariotti Mauro Giorgio	
Department of Earth, Environmental and Life Sciences (Dipartimento di Scienze della Terra, dell' Ambiente e della Vita - DISTAV)	
Places: 4 - Grants: 2 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 2 grants from the University	
Comparative assessment procedure	Qualifications/Publications
Research themes	<ol style="list-style-type: none"> 1. CHARACTERIZATION, ENHANCEMENT AND IMPROVEMENT OF PLANTS FOR AGRICULTURE AND FORESTRY (e.g.: hybridization, propagation, environmental impact of crops, problems concerning the conservation and transport of the finished product, in vitro techniques and genetic improvement, disease resistant forest plants, plants for the production of biomasses). 2. BOTANY APPLIED TO THE MANAGEMENT OF MOUNTAIN AND RURAL TERRITORIES (e.g.: rural and forest heritage and traditional agriculture, spontaneous or induced renaturalization in mountain and marginal territories, enhancement of rural landscapes and territories as an expression of biodiversity caused by rural-forest and pasture activities, local ecotypes, species and phytocenosis of apiculture, ecology and mapping of truffle areas, plant/mushroom relationships). Vegetal biomasses as energy sources. Biological and integrated control of cultivations. 3. CONSERVATION AND ENHANCEMENT OF NATURAL BIODIVERSITY (e.g.: ex situ and in situ conservation of threatened species, origins and determining factors of present biodiversity and environmental balances, conservation of the germoplasm, problems created by invasive species). 4. ENVIRONMENTAL REQUALIFICATION (e.g.: accumulation of micro- and macro-nutrients in plants with special attention to metals and their implications for food and environmental safety, selection and use of plants for phytodecontamination to restore contaminated or degraded areas, restoring of ecological networks, ecophysiological processes of accumulation and tolerance of polluting substances in plants, selection and use of plants in areas hit by fire or subject to erosion processes or desertification, mitigation of the impact of linear infrastructures, biomonitoring of air and soil quality by means of plants, evaluation of naturalness, databases and S.I.T. with contents mainly relating to the environment for the conservation of biodiversity). 5. BOTANY APPLIED TO THE CULTURAL HERITAGE AND TO URBAN PARKS AND GARDENS (e.g.: vegetal biodeteriogens, wood cultural heritage, botanical features of historical gardens and urban parks and gardens, acclimatizing gardens, cataloguing, management and enhancement of botanical collections).
Further information on how to present qualifications/publications	In addition to English and Italian stated in the general Notice of Public Exam, candidates may submit their applications and documentation in Spanish or French.
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. Mauro Mariotti Polo Botanico Hanbury, Dipartimento per lo Studio del Territorio e delle sue Risorse (DIPTERIS), Corso Dogali 1M, 16126 Genova or to the e-mail address m.mariotti@unige.it The name, status and service place of the referees chosen by the candidates must be stated in their applications.
For further information please contact	Prof. Mauro Mariotti, e-mail: m.mariotti@unige.it

Doctoral School **School of Science and Technology for the Environment and Territory**
Disciplines involved: *Field 04 - Earth Sciences, Field 05 - Biological Sciences*
 Director: Firpo Marco
 Access and attendance fees, second instalment: € 250,00

Course in: ENVIRONMENTAL SCIENCES (SCIENCE OF THE SEA) (CODE 4828)

Coordinator: Bianchi Carlo Nike	
Department of Earth, Environmental and Life Sciences (Dipartimento di Scienze della Terra, dell' Ambiente e della Vita - DISTAV)	
Places: 4 - Grants: 2 (*).	
(*) 2 grants from the University	
Comparative assessment procedure	Qualifications/Publications
Research themes	Any topic within the field of the following disciplines: Ecology and Marine Biology, Applied Ecology, the Evaluation of Environmental Impact, the study and management of biotic resources, Management of the coastal strip, Protected Marine Areas, Physical, Chemical and Biologic Oceanography, Radio-Ecology, environmental methodologies applied to industrial processes, the study of marine pollution starting from simple spreading processes to environmental requalification.
Further information on how to present qualifications/publications	It should be clear that the choice of the them for the research project does not put the graduate student in any differentiated juridical position concerning the object of the research activity that will be developed during the doctoral course, on indication of the Teaching Body. Qualifications/publications refer to the information in the application and curriculum vitae et studiorum, the research project, other publications. The latter should not be longer than ten pages each.
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 Carlo Nike BIANCHI (DiSTAV) Dipartimento di Scienze della Terra, dell' Ambiente e della Vita Università di Genova Corso Europa 26 16132 Genova, Italy. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
For further information please contact	Prof Carlo Nike BIANCHI (DiSTAV) Dipartimento di Scienze della Terra, dell' Ambiente e della Vita Università di Genova Corso Europa 26 - 16132 Genova, Italy Phone: +39 010 353 8063 Fax: +39 010 353 8140 E-mail : nbianchi@dipteris.unige.it Segretario Dott. Paolo Vassallo : paolo.vassallo@unige.it

Doctoral School **School of Science and Technology for the Environment and Territory**
Disciplines involved: *Field 04 - Earth Sciences, Field 05 - Biological Sciences*
 Director: Firpo Marco
 Access and attendance fees, second instalment: € 250,00

Course in: SCIENZE DELLA TERRA (CODE 4829)

Coordinator: Firpo Marco	
Department of Earth, Environmental and Life Sciences (Dipartimento di Scienze della Terra, dell' Ambiente e della Vita - DISTAV)	
Places: 4 - Grants: 2 (*).	
(*) 1 grant from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research – “Innovative telecommunication wide band systems with the use of satellites for differentiated uses IN the field of safety, prevention and intervention IN the case of natural catastrophes”	
Comparative assessment procedure	Exams (written test and interview)
Written test	7 November 2012, 8:30 a.m., in Aula Perrier of the former Department for the Study of the Territory and its Resources (Dipartimento per lo Studio del Territorio e sue Risorse - DIPTERIS), Corso Europa 26, 16132 Genova
Interview	8 November 2012, 3 p.m., in Room 5 of the former Department for the Study of the Territory and its Resources (Dipartimento per lo Studio del Territorio e sue Risorse - DIPTERIS), Corso Europa 26, 16132 Genova
Exam syllabus	The written test will concern a general theme on topics relating to the specialisation sectors of the Doctoral course. The interview will concern an in-depth analysis of the contents of the written test and the assessment of basic scientific and/or technical knowledge for research in one of the fields of the Doctoral course.
Research themes	APPLICATION OF EARTH SCIENCES TO THE TERRITORY AND ITS GEORESOURCES: study of the territorial structure and geological materials, evaluation of the environmental impact and mitigation of natural disasters. STUDY, DEFENCE AND CONSERVATION OF THE MARINE AND COASTAL ENVIRONMENT: study of the evolution of the coast and the seafloor to contribute to the management of the coastal zone. EVOLUTION OF THE MANTLE-CRUST SYSTEM: study of the geological, petrogenetic, geophysical and geochemical processes which characterise the evolution of the lithosphere in the main geodynamic environments. EVOLUTION OF SEDIMENTARY BASINS: use of sedimentological, palaeontological, stratigraphic, structural and mineral-petrographic instruments to study the evolution of sedimentary basins and the formation of sedimentary succession.
Foreign languages	English
For further information please contact	Prof. Marco FIRPO Tel.0103538272, Fax 010-352169 e-mail firpo@dipteris.unige.it Ilaria GALLIZIA Tel. 0103538566, Fax 010-352169 e-mail ilaria.Gallizia@unige.it

Doctoral School**School of Science and Technology for Information and Knowledge****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 06 - Medical Sciences, Field 08 - Civil Engineering and Architecture, Field 12 - Law Studies , Field 13 - Economic and Statistical Sciences

Director:

Bianco Bruno

Access and attendance fees, second instalment: € 500,00

Course in: BIOENGINEERING (CODE 4830)**Associated Universities: University of Cagliari**

Coordinator: Fato Marco Massimo	
Interschool Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento interscuola di Informatica, bioingegneria, robotica e ingegneria dei sistemi - DIBRIS)	
Places: 6 - Grants: 3 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 3 grants from the University	
Comparative assessment procedure	Qualifications/Publications
Research themes	Bioimaging and Neuro-computer science, Medical Information Technology and Bio-information Technology, Biomechanics, neural control of movements and rehabilitation engineering, Cellular and Tissue engineering, Neuroengineering, Bioelectronics and Biosensors, Models of Perceptual Systems and Biorobotics, Biomaterials and bioapplications.
Further information on how to present qualifications/publications	Candidates must present a research project that lasts three years. The project, qualifications/publications and curriculum vitae presented by the candidates will be evaluated. For each qualification a self-certified photocopy true to the original must be attached.
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. Marco Massimo Fato, Dipartimento interscuola di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS) former DIST, Viale Causa 13 A16145 - Genova. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
For further information please contact	Prof. Marco Massimo Fato Dipartimento interscuola di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS) ex DIST Viale Causa 13 A16145 - Genova. E-mail: marco.fato@unige.it

Doctoral School

School of Science and Technology for Information and Knowledge

Disciplines involved:

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 06 - Medical Sciences, Field 08 - Civil Engineering and Architecture, Field 12 - Law Studies, Field 13 - Economic and Statistical Sciences

Director:

Bianco Bruno

Access and attendance fees, second instalment: € 500,00

Course in: **COMPUTATIONAL INTELLIGENCE**

Specialization: **COMPUTATIONAL ECONOMICS AND FINANCE (CODE 4831)**

Coordinator: Cincotti Silvano	
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	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	9 November 2012, 10 a.m. in the Department of Marine, Electric, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN) Via all'Opera Pia, 11A 16145 Genova GE On request, the interview may also be done using computers (video conference via SKYPE) by contacting the Coordinator of the Doctoral Course Prof. Silvano Cincotti (silvano.cincotti@unige.it) in time.
Exam syllabus	The interview will be a discussion of the research project and qualifications/publications presented.
Research themes	The Computational Economics and Finance specialization aims at developing intelligent computational approaches in finance and economics. Two main research themes with the corresponding syllabuses have been singled out for this specialization: 1. 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 heterogeneous 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 syllabus develops skills that can be applied directly to the financial industry, to government and international organizations and to the academic world. 2. 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, statistical arbitrage as well as the emerging theme of high frequency automated trading. The syllabus develops skills for natural work opportunities both in the financial and academic fields.
Further information on how to present qualifications/publications	The qualifications/publications must include a detailed description and the plan for the development of a research project on one of the syllabuses of the Computational Economics and Finance specialization, so that the candidates' capacity to organize and carry out a research can be evaluated. Should they be admitted to the the doctoral course, candidates will carry out their activity within the chosen syllabus for their project, but not necessarily on the specific activities described in the actual project. The research project (min. of 8,000 to a max. of 16,000 characters including spaces and punctuation) must include: - 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 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 words including spaces and punctuation for each course); - a list of the exams done with the number of credits, marks and syllabuses (max 500 characters including spaces and punctuation for each course); - any other qualifications relevant to the application and scientific activity carried out; - a letter that states aptitude motivations and the advancement expectations of the candidate which prompted 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 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
For further information please contact	Coordinator of the doctoral course Prof. Silvano Cincotti – Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME) Tel. +39 010 353 2080 E-mail: silvano.cincotti@unige.it Department administration contact person Mrs Carla Cignini – Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN) Tel. 010 353 2215 E-mail: Carla.Cignini@unige.it

Doctoral School

School of Science and Technology for Information and Knowledge

Disciplines involved:

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 06 - Medical Sciences, Field 08 - Civil Engineering and Architecture, Field 12 - Law Studies, Field 13 - Economic and Statistical Sciences

Director:

Bianco Bruno

Access and attendance fees, second instalment: € 50,00

Course in: **COMPUTATIONAL INTELLIGENCE**

Specialization: **INFORMATION TECHNOLOGY FOR INTERACTING COGNITIVE ENVIRONMENTS (CODE 4832)**

Coordinator: Cincotti Silvano	
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	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	9 November 2012, 10 a.m. at the Department of Marine, Electric, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN), Via all'Opera Pia, 11A 16145 Genova GE On request, the interview may also be done using computers (video conference via SKYPE) by contacting the Coordinator of the Doctoral Course Prof. Silvano Cincotti (silvano.cincotti@unige.it) in time.
Exam syllabus	The interview will be a discussion of the research project and qualifications/publications presented.
Research themes	The specialization in Information Technology for Interacting Cognitive Environments focuses attention on the designing of interactive cognitive environments. Three main research themes have been singled out for this specialization: 1. Assistive Technologies for Health and Autonomous Living. This syllabus concerns the study and development of technologies to improve the autonomy and independence of individuals, taking into consideration the needs and requirements of the end users and of their caretakers. The professional figures trained in this specialization will be ready to introduce technologies capable of assisting people with health problems in their daily activities, developing a high level capacity of analysis that will make them able to understand not only the technical and scientific implications, but also the socio-psychological ones. 2. Network Embedded Systems. This specialization considers various technological features of embedded systems and networks of the future which represent a very important basis for the development of many intelligent and pervasive applications. From the technical and scientific point of view, the course envisages the in-depth study of topics such as network simulations, the design of processors and embedded systems, communication networks and intelligent sensors. 3. Multi-sensor Surveillance. This syllabus offers research study programmes linked to the development of specific techniques for the singling out, localization and tracing of multiple objects in real scenes as well as the study of innovative and robust algorithms for the comprehension of a scene by means of mobile television and PTZ cameras, with special focus on Data-Fusion topics for the development of innovative techniques and architectures.
Further information on how to present qualifications/publications	The qualifications/publications must include a detailed description and the plan for the development of a research project on one of the syllabuses of the Computational Economics and Finance specialization, so that the candidates' capacity to organize and carry out a research can be evaluated. Should they be admitted to the the doctoral course, candidates will carry out their activity within the chosen syllabus for their project, but not necessarily on the specific activities described in the actual project. The research project (min. of 8,000 to a max. of 16,000 characters including spaces and punctuation) must include: - 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 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 words including spaces and punctuation for each course); - a list of the exams done with the number of credits, marks and syllabuses (max 500 characters including spaces and punctuation for each course); - any other qualifications relevant to the application and scientific activity carried out; - a letter that states aptitude motivations and the advancement expectations of the candidate which prompted 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 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
For further information please contact	Coordinator of the doctoral course Prof. Silvano Cincotti – Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME) Tel. +39 010 353 2080 E-mail: silvano.cincotti@unige.it Department administration contact person Mrs Carla Cignini – Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN) Tel. 010 353 2215 E-mail: Carla.Cignini@unige.it

Doctoral School

School of Science and Technology for Information and Knowledge

Disciplines involved:

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 06 - Medical Sciences, Field 08 - Civil Engineering and Architecture, Field 12 - Law Studies, Field 13 - Economic and Statistical Sciences

Director:

Bianco Bruno

Access and attendance fees, second instalment: € 500,00

Course in: COMPUTATIONAL INTELLIGENCE

Specialization: SPACE SCIENCE AND ENGINEERING (CODE 4833)

Coordinator: Cincotti Silvano	
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	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	9 November 2012, 10 a.m. at the Department of Marine, Electric, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN), Via all'Opera Pia, 11A 16145 Genova GE On request, the interview may also be done using computers (video conference via SKYPE) by contacting the Coordinator of the Doctoral Course Prof. Silvano Cincotti (silvano.cincotti@unige.it) in time.
Exam syllabus	The interview will be a discussion of the research project and qualifications/publications presented.
Research themes	The Space Science and Engineering Specialization has the objective of developing specific abilities and skills for the field of space. Two main research themes with their relative syllabuses can be singled out for this specialization: 1. Electromagnetic Prospecting, Space Communications and Environmental Observations. This syllabus studies the features relative to terrestrial, marine and lake observation, with special emphasis on the development and use of remote sensing and electromagnetic prospecting in magnetosphere stratifications; 2. Microelectronics and Space Robotics. The syllabus concerns research topics relative to space robotics and microelectronic systems refractory to environmental radiations.
Further information on how to present qualifications/publications	The qualifications/publications must include a detailed description and the plan for the development of a research project on one of the syllabuses of the Computational Economics and Finance specialization, so that the candidates' capacity to organize and carry out a research can be evaluated. Should they be admitted to the the doctoral course, candidates will carry out their activity within the chosen syllabus for their project, but not necessarily on the specific activities described in the actual project. The research project (min. of 8,000 to a max. of 16,000 characters including spaces and punctuation) must include: - 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 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 words including spaces and punctuation for each course); - a list of the exams done with the number of credits, marks and syllabuses (max 500 characters including spaces and punctuation for each course); - any other qualifications relevant to the application and scientific activity carried out; - a letter that states aptitude motivations and the advancement expectations of the candidate which prompted 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 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
For further information please contact	Coordinator of the doctoral course Prof. Silvano Cincotti – Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME) Tel. +39 010 353 2080 E-mail: silvano.cincotti@unige.it Department administration contact person Mrs Carla Cignini – Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN) Tel. 010 353 2215 E-mail: Carla.Cignini@unige.it

Doctoral School**School of Science and Technology for Information and Knowledge****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 06 - Medical Sciences, Field 08 - Civil Engineering and Architecture, Field 12 - Law Studies, Field 13 - Economic and Statistical Sciences

Director:

Bianco Bruno

Access and attendance fees, second instalment: € 500,00

Course in: PHYSICS (CODE 4834)

Coordinator: Mattera Lorenzo	
Department of Physics (Dipartimento di Fisica - DIFI)	
Places: 12 - Grants: 6 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 4 grants from the University	
(*) 2 grants financed by the National Institute of Nuclear Physics (Istituto Nazionale di Fisica Nucleare): - 1 free theme - 1 on the theme "Analysis of the sources of noise and optimization of sensitivity in interferometric revelators of gravitational waves"	
Comparative assessment procedure	Qualifications/Publications and Exams (qualifications/publications, written test and an interview)
Written test	5 November 2012, 9 a.m. at the Department of Physics (Dipartimento di Fisica - DIFI), Via Dodecaneso 33, 16146 Genova
Interview	9 November 2012, 9 a.m. at the Department of Physics (Dipartimento di Fisica - DIFI), Via Dodecaneso 33, 16146 Genova
Exam syllabus	Written test: exercises on basic Physics Interview: a discussion of the written test, of the research project
Research themes	The research lines to which the Physics Doctoral Course makes reference cover a broad scientific spectrum, comprising almost all the top research in Italy and in the world. Genoa has specialised especially in a few sectors which give rise to significant Doctoral dissertations on the subject-matter of fundamental interaction physics, nuclear physics, material physics and biophysics. The lines of research cover the following fields: nuclear and subnuclear physics, theoretical physics, material physics, biophysics and cybernetics, optical physics, astrophysics, health care physics, environmental physics, physics of the atmosphere and ocean, didactics and history of physics. In particular there are consolidated research activities in the doctoral course that are directly linked to specific themes of the School: research in nuclear and subnuclear physics involves developments with a strong innovative aspect on the acquisition and treatment of extremely complex information and the realisation of highly miniaturised and "intelligent" electronic devices; the theoretical research concerns the numerical simulation of complex systems with special reference to molecular clusters and to transport phenomena in fluids and in quantum systems; research in material physics mostly concerns nanotechnologies, physical properties of microsystems and materials, the use and development of scanning tunnelling microscopy with applications to nanostructured surfaces; research in biophysics involves, among other things, the study of bio-ICT technology and the study of protein structures involved in pathologies of the nervous system by means of atomic force and scanning microscopy; research in health care physics goes from the study of the fusion of clinical images from different equipment to the improvement of new equipment designed and developed within the sphere of DIFI and of the INFN laboratories.
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. L. Mattera, Department of Physics (Dipartimento di Fisica - DIFI), Via Dodecaneso 33, 16146 Genova. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English
For further information please contact	Prof. Lorenzo Mattera e-mail: mattera@fisica.unige.it tel: (+39) 010353 - 6374 Mrs Angela Martinoli e-mail: martinoli@fisica.unige.it tel: (+39) 010353 - 6366

Doctoral School**School of Science and Technology for Information and Knowledge****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 06 - Medical Sciences, Field 08 - Civil Engineering and Architecture, Field 12 - Law Studies, Field 13 - Economic and Statistical Sciences

Director:

Bianco Bruno

Access and attendance fees, second instalment: € 500,00

Course in: COMPUTER SCIENCE (CODE 4835)

Coordinator: De Floriani Leila	
Interschool Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento interscuola di Informatica, bioingegneria, robotica e ingegneria dei sistemi - DIBRIS)	
Places: 6 - Grants: 3 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 2 reserved for the winner of Marie Curie grants.	
(*) 2 grants from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "ICT and electronic components"	
Comparative assessment procedure	Qualifications/Publications
Research themes	<ol style="list-style-type: none"> 1. Databases and information technology systems: models and architectures for databases; XML documents management; Web databases; security problems; geographic information technology systems, data warehousing; data mining and knowledge management. 2. Computer graphics and geometric modelling: multi-resolution graphics and modelling; geometry processing; computational topology; analysis and structuring of geometrical forms, applications to the processing of geographic data, scientific visualization, animation. 3. Image processing: methods for the reconstruction of images; applications in medicine and astronomy; reconstruction and analysis of microscopic images; tridimensional reconstruction; analysis of sequences of images; recognition of 3D objects. 4. Artificial Intelligence: agents and multi-agent systems; techniques for the representation of knowledge and languages based on computational logic; automatic learning; the basis of the statistic theory of learning; applications to the finding of images and texts and to bio-information technology. 5. Programming languages: design, bases and extensions of modular and object oriented languages; multi-stage programming; reflexivity and constructions for meta-programming; language models and semantics; types theory and types systems. 6. Design methods and development of software systems: software engineering; techniques for the development of systems based on components, distributed, mobile and multi-agents; technologies based on UML and their extensions; automatic verifying methods of protocols and concurrent systems. 7. Parallel and distributed systems: prototyping and evaluation of performances; distributed platforms with high performances and low costs; development environments for distributed applications; "cluster computing" and mobile computation.
Further information on how to present qualifications/publications	Suggestions on how to structure research projects are available on page: http://www.disi.unige.it/dottorato (section: Instructions for applicants)
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-adm@disi.unige.it The name, status and service place of the referees chosen by the candidates must be stated in their applications. An example of a reference letter is available on page: http://www.disi.unige.it/dottorato (section: Instructions for applicants)
For further information please contact	Coordinator of the Doctoral Course in Computer Science: Prof.ssa Leila De Floriani DISI – Dipartimento di Informatica e Scienze dell'Informazione Via Dodecaneso 35 - 16146 Genova Phone: +39 (010) 3536704 Email: defflo@disi.unige.it Contact person in administration: Mrs Anna Vezzosi DISI – Dipartimento di Informatica e Scienze dell'Informazione Via Dodecaneso 35 - 16146 Genova Phone: +39 (010) 3536627 Email: vezzo@disi.unige.it

Doctoral School**School of Science and Technology for Information and Knowledge****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 06 - Medical Sciences, Field 08 - Civil Engineering and Architecture, Field 12 - Law Studies, Field 13 - Economic and Statistical Sciences

Director:

Bianco Bruno

Access and attendance fees, second instalment: € 500,00

Course in: ELECTRONIC ENGINEERING, INFORMATION TECHNOLOGY, FOR ROBOTICS AND TELECOMMUNICATIONS (CODE 4836)

Coordinator: Bianco Bruno	
Department of Marine, Electric, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN)	
Places: 12 - Grants: 6 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant)	
(*) 5 grants from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "ICT and electronic components"	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	8 November 2012, 9 a.m., at the Department of Marine, Electric, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN) Via Opera Pia 11A, 16145 Genova. Note: On request, the interview may also be done using computers (video conference via SKYPE) by contacting the Coordinator of the Doctoral Course Prof. Bruno Bianco, Department of Marine, Electric, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN), Università di Genova, Via Opera Pia 11A, 16145 Genova, Tel +39 0103532753; +39 3483053891, E-mail: Bianco@unige.it .
Exam syllabus	The interview will be a discussion of the research project and qualifications/publications presented.
Research themes	Affective computing – Analysis and understanding of natural language – Bioelectronics – Control of industrial processes – Control of nonholonomic systems – Manipulation control – Navigation control – Neural control – Control of distributed information systems – ‘Dataware house and data mining’– Processing of images and signals – General Electronics – Molecular and cellular Electronics – Graphics – ‘Green networking’ – ICT for cultural heritage – ICT for health – Medical computer science – Musical computer science – Software engineering – Economic and Financial engineering – Artificial Intelligence – Multimedia interfaces – ‘Knowledge management’ – Programming languages and operative systems – Languages for real time and manipulation – Logistics of industrial systems – Electromagnetism – Microelectronics – Nanoelectronics – Microsystems and physical structures for perception and processing – Models of perceptive systems – Neuroinformatics – Optoelectronics – Logic and functional programming – Mathematical programming and optimization –Telecommunications networks – Neural networks – Recognition of signals and images – ‘Serious games and simulations’ – ICT security – Decisional support systems – Remote sensing – Numeric theory and processing of signals – Treatment of signals in multimedia systems – Service quality in telecommunications networks – Automatic Reasoning – Virtual reality – Submarine and space robotics – Information Technology Security –Simulation and emulation of telecommunication networks – Learning systems – Mobile communications systems – Embedded electronic systems – Neuromorphic electronic systems – Video-surveillance and environmental intelligence systems – Interactive multimedia systems – Micro Electro-Mechanical Systems (MEMS) — Languages of intelligent systems – Mechatronic systems – Sensors – Technology of robotic systems – Artificial vision.
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. Bruno Bianco, Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, 16145 Genova. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English
For further information please contact	Professor: Prof. Bruno Bianco, Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, 16145 Genova, Tel +39 0103532753; +39 3483053891, E-mail: Bianco@unige.it Contact person in administration: Mrs Carla Cignini, Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, 16145 Genova, Tel.+39 0103532215, E-mail: Carla.Cignini@unige.it

Doctoral School**School of Science and Technology for Information and Knowledge****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 06 - Medical Sciences, Field 08 - Civil Engineering and Architecture, Field 12 - Law Studies, Field 13 - Economic and Statistical Sciences

Director:

Bianco Bruno

Access and attendance fees, second instalment: € 500,00

Course in: LOGISTICS, TRANSPORT AND TERRITORY (CODE 4837)

Coordinator: Di Febbraro Angela	
Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti - DIME)	
Places: 4 - Grants: 2 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 2 (without grant).	
(*) 1 grant from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Advanced transport and logistics, mobility info about people and goods"	
Comparative assessment procedure	Exams (written test and interview)
Written test	5 November 2012, 10 a.m., at the Italian Excellence Centre for Integrated Logistics (Centro italiano di eccellenza sulla logistica integrata - C.I.E.L.I.), Via Bensa, 1, 16124 Genova
Interview	6 November 2012, 10 a.m., at the Italian Excellence Centre for Integrated Logistics (Centro italiano di eccellenza sulla logistica integrata - C.I.E.L.I.), Via Bensa, 1, 16124 Genova
Exam syllabus	The first test will consist in a paper where candidates must show their aptitude for scientific research concerning complex themes with considerable interdisciplinary contents; the second test will be an interview that aims at highlighting candidates' knowledge of the issues concerning the themes subject-matter of the doctoral course, their aptitude for scientific research, curricular and any work experience.
Research themes	1. The Italian Port Authorities and their management. Comparative analysis, also with reference to the international situation, in terms of normative frameworks and institutional systems, organisational structures and management procedures, formulation of strategies and alliance policies. Cost/efficacy analysis and evaluation concerning the traffic and competitive trends. 2. The corridors and the correlated infrastructural policies of the European Union and its member States: state of advancement of each corridor and of the single stretches; legislation and international agreements; quantitative models for the study of the corridors. 3. Port systems and their relations with complementary territorial situations (interports): possible regulative and management solutions; management complementarity, activities in ports and interports and the study of the characteristics by means of quantitative models; integration of inter-regional territorial policies and compatible development. 4. Policies, organisational systems and competitiveness in global logistic markets: tendencies of the logistic services offer of global transport groups; strategies of vertical integration; the performance of global transport groups. 5. The study of dynamic and organisational technologies of logistics systems and transport, with reference to difficulties in the network, to the more general problems of intermodal transport, to connections between ports and retroports. 6. Intelligent transport systems.
Foreign languages	English or French
For further information please contact	Contact person in administration: Dott.ssa Ilaria Giannotti – C.I.E.L.I. via Bensa 1, 16124 Genova – tel. 010 209 51931/2 – e-mail: cieli@unige.it

Doctoral School**School of Science and Technology for Information and Knowledge****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 06 - Medical Sciences, Field 08 - Civil Engineering and Architecture, Field 12 - Law Studies, Field 13 - Economic and Statistical Sciences

Director:

Bianco Bruno

Access and attendance fees, second instalment: € 500,00

Course in: MATHEMATICS AND APPLICATIONS (CODE 4838)

Coordinator: Piana Michele	
Department of Mathematics (Dipartimento di Matematica - DIMA)	
Places: 8 - Grants: 4 (*)	
(*) 4 grants from the University	
Comparative assessment procedure	Qualifications/Publications
Research themes	The research lines which characterise the Doctoral Course in Mathematics and Applications refer to all the disciplinary fields of mathematics. The themes on which the research activity mainly focuses are the following: harmonic analysis, commutative algebra, computer algebra; complex projective geometry, K-theory and algebraic cycles; analytic theory of numbers; geometric methods in physics theories, continuum mechanics; mathematical logic; mathematical probability and statistics; inverse problems; numeric analysis and computational methods with applications in medical imaging, neurosciences and astrophysics. The interactions with research themes of other doctoral courses of the School are strong (especially with the "Physics" PhD concerning themes of physical mathematics, harmonic analysis and with the "Computer Science", "Electronic, Computer Science, Robotics and Telecommunications Engineering" PhDs and the "Mathematical and Simulation Engineering" PhD on a broad spectrum of topics and issues).
Further information on how to present qualifications/publications	<p>Selections are based on the following qualifications:</p> <ul style="list-style-type: none"> - specialist degree mark - curriculum of studies - degree dissertation - at least two reference letters - a short research project centred on one of the research themes of the Doctoral Course in Mathematics and Applications - other publications <p>Send to the coordinator of the doctoral course Prof. Michele Piana – Dipartimento di Matematica (DIMA)- Università degli Studi di Genova - Via Dodecaneso 35, 16146 Genova:</p> <ul style="list-style-type: none"> - a certificate issued by the university with the exams sat and the relative marks; - a hard copy of the degree thesis and any publications.
Information on references	<p>Candidates must choose at least two referees to support their candidature. These referees must be university professors, even from foreign universities, or experts in the subject and it will be their concern to send the reference letters, within the deadline of the public notice to the Coordinator of the Doctoral Course at the following address:</p> <p>Prof. Michele Piana – Dipartimento di Matematica (DIMA)- Università degli Studi di Genova - Via Dodecaneso 35, 16146 Genova.</p> <p>The name, status and service place of the referees chosen by the candidates must be stated in their applications.</p>
For further information please contact	Prof. Michele Piana - Dipartimento di Matematica (DIMA) - Via Dodecaneso 35, 16146 Genova Telephone: 0103536939

Doctoral School**School of Science and Technology for Information and Knowledge****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 06 - Medical Sciences, Field 08 - Civil Engineering and Architecture, Field 12 - Law Studies, Field 13 - Economic and Statistical Sciences

Director:

Bianco Bruno

Access and attendance fees, second instalment: € 500,00

Course in: MONITORING OF SYSTEMS AND ENVIRONMENTAL RISKS MANAGEMENT (CODE 4839)

Coordinator: Sacile Roberto	
Interschool Department of IT, Bioengineering, Robotics and Systems Engineering (Dipartimento interscuola di Informatica, bioingegneria, robotica e ingegneria dei sistemi - DIBRIS)	
Places: 7 - Grants: 4 (*).	
(*) 2 grants as per Ministerial Decree 198/03 main fields of research: - "Advanced transport and logistics, mobility info about people and goods" - "Energy saving and distributed micro-generation"	
(*) 2 grants financed by the CIMA Foundation	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	12 November 2012, 2 p.m., at the "Palazzina Marchi", University Campus of Savona (Campus Universitario di Savona), via Magliotto 2, 17100 Savona
Exam syllabus	The comparative assessment consists in the evaluation of qualifications/publications and an interview, the contents of which being theoretical and/or practical knowledge relating to the research themes indicated below and to the candidates' research activities in their research field of interest.
Research themes	Modelling and control of environmental pollution. Biomasses and Waste. Dynamics of Ecosystems. Atmospheric and Hydrological Processes. Wildfire Risk. Forecasting and Prevention of Hydrogeological Disasters. Environmental monitoring. Renewable energy. Sustainable development in applicable fields such as urban transport and traffic, the integration of systems based on renewable sources of energy and sanitization systems for water; smart cities; monitoring of rural and agricultural development.
Further information on how to present qualifications/publications	A summary of the qualifications/titles submitted and attached to the application can also be sent via email to: dottorato.ambiente@unige.it
Information on references	Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: Prof. Roberto Sacile c/o Dipartimento di Informatica, Sistemistica e Telematica (DIST) – Università di Genova, via Opera Pia 13, 16145 Genova e-mail: dottorato.ambiente@unige.it The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English
For further information please contact	Roberto Sacile c/o Università di Genova via Opera Pia 13 16145 Genova Tel +39 010 3532153 Fax +39 010 3532154 e-mail dottorato.ambiente@unige.it

Doctoral School**School of Science and Technology for Information and Knowledge****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 06 - Medical Sciences, Field 08 - Civil Engineering and Architecture, Field 12 - Law Studies, Field 13 - Economic and Statistical Sciences

Director:

Bianco Bruno

Access and attendance fees, second instalment: € 500,00

Course in: NANOTECHNOLOGIES (CODE 4840)

Coordinator: Di Zitti Ermanno	
Department of Marine, Electric, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN)	
Places: 4 - Grants: 2 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 2 (without grant).	
(*) 2 grants from the University	
Comparative assessment procedure	Qualifications/Publications
Research themes	<p>The research lines of the Doctoral Course have been diversified to express the possible different specializations of experts in nanotechnologies. They are thus summarised:</p> <p>1. Novel structured and polyfunctional materials. This line of research investigates the features relative to the synthesis, making and characterisation of the properties of nanomaterials and nanostructures;</p> <p>2. Nanotechnologies and nanodevices for ICT. This concerns research themes of theoretical and experimental nature for the development of nanoelectronic devices, nanosensors, nanoarchitectures and new computational paradigms such as spintronics and quantum computing; furthermore the curriculum investigates features directed towards the development of technological and methodological processes for the making of nano devices which will occupy a sound fraction of the global market in the next ten years;</p> <p>3. Bionanotechnologies. The theme concerns the inherent features of technologies for the characterisation and manipulation of single biomolecules, technologies based on biomolecules for the making of innovative nano devices and sensors applicable to genomics, proteomics and advanced medical diagnostics.</p>
Further information on how to present qualifications/publications	<p>The research project (max 4000 words) should include:</p> <ul style="list-style-type: none"> - title of the research; - state of the art in the field and relative bibliographical references; - objectives and results expected; - (if relevant) experimental methods and data analysis. <p>In addition to the qualifications/title required by the general Public Notice of exam, the following information, relative to the Specialist degree/ II level degree/ Master of Science (Laurea Specialistica/Magistrale/Master of Science) course followed, is required:</p> <ul style="list-style-type: none"> - title of the thesis dissertation and a brief description of it (1500-3000 words); - list of the exams done with credits and marks. <p>Moreover, the following information, if present, will also be taken into consideration:</p> <ul style="list-style-type: none"> - description of the syllabuses of the courses attended (max 5 lines each); - any other qualifications/publications relevant to the application and scientific activity carried out (complete thesis, copy of significant publications, etc.); - a letter that states aptitude motivations and the advancement expectations of the candidate which are the premise of the application.
Information on references	<p>Candidates are required to 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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address:</p> <p>Prof. Ermanno Di Zitti, Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni – (DITEN) – Università di Genova, Via Opera Pia 11A, 16145 Genova E-mail: dizitti@unige.it</p> <p>The name, status and service place of the referees chosen by the candidates must be stated in their applications.</p>
For further information please contact	<p>Coordinator of the Doctoral Course Prof. Ermanno Di Zitti Tel. 010 353 2788 E-mail: dizitti@unige.it Department administration contact person Mrs Carla Cignini – DITEN Tel. 010 353 2215 Email: carla.cignini@unige.it</p>

Doctoral School**School of Engineering Sciences and Technologies****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 04 - Earth Sciences, Field 08 - Civil Engineering and Architecture

Director:

Capobianco Massimo

Access and attendance fees, second instalment: € 300,00

Course in: FLUID DYNAMICS AND PROCESSES OF ENVIRONMENTAL ENGINEERING (CODE 4841)

Coordinator: Vittori Giovanna	
Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale - DICCA)	
Places: 4 - Grants: 2 (*)	
(*) 1 grant from the University	
(*) 1 grant as per Ministerial Decree 198/03 main fields of research: – “Energy saving and distributed micro-generation”	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	13 November 2012, 9 a.m. at the Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale - DICCA), via Montallegro 1, 16145 Genova On request, the interview may also be done using computers by contacting the Coordinator of the Doctoral Course (prof.ssa Giovanna Vittori, indirizzo e-mail: vittori@dicat.unige.it) at least 15 days before the evaluation.
Exam syllabus	The interview will be an in-depth scientific discussion of the candidate’s research project, qualifications and publications.
Research themes	Fundamentals of fluid dynamics and environmental processes: - Analysis of the structure and modelling of turbulence in non stationary motions. - Control and optimization of fluid systems (friction reduction, re-attachment of a removed flow, optimization of mixing, deadning of noise, etc.) -Dynamics of vorticity and propelling thrust generated by an oscillating wing profile. Hydrodynamics and morphodynamics of water flows, coasts, estuaries and lagoons: - Hydrodynamics and morphodynamics of estuaries and tidal environments (canals, shallow waters and sandbanks). - Morphodynamics of the interwoven riverbeds. – Modelling of mobile bottom currents models. - Formation of large scale moulds of the sea floor associated to sea motions. - Models of coastal circulation. Biological fluid dynamics - Eye fluid dynamics. Analysis and control of chemical processes with a low environmental impact - Analysis and simulation of innovative systems for the production of energy (fuel cells) - Energy enhancement of biomasses - Capturing, transport and seizure of greenhouse gases - Oxidization of metals and alloys of technological interest.
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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: vittori@dicat.unige.it The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English (foreigners must also prove their knowledge of Italian)
For further information please contact	Mrs Concetta D'Agostino tel. 010 3532470 – e-mail: tina@dicat.unige.it

Doctoral School**School of Engineering Sciences and Technologies****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 04 - Earth Sciences, Field 08 - Civil Engineering and Architecture

Director:

Capobianco Massimo

Access and attendance fees, second instalment: € 300,00

Course in: CHEMICAL ENGINEERING, OF MATERIALS AND PROCESS (CODE 4842)

Coordinator: Del Borghi Marco	
Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale - DICCA)	
Places: 4 - Grants: 2 (*).	
(*) 1 grant from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Enhancement of the typical products of agricultural foodstuff and food safety by means of new systems concerning characteristics and quality guarantees"	
Comparative assessment procedure	Qualifications/Publications
Research themes	Chemical and Process Engineering Sector: 1. Plants and biological processes to stop emissions of pollutants; depuration of refluents by means of bioabsorption; thermodynamics and bioenergy of bioprocesses; membrane separation. 2. Processes aimed at competitive and ecosustainable industrial production; bio-production of food compounds from agricultural foodstuff residues; rheology and conservation of foodstuffs; analysis of the lifecycle of processes and products. 3. Reliability and safety of chemical plants: model of dispersion phenomena; statistic analysis of risk; prevention of workplace accidents; optimization of storage and movement of products with contamination risks; model of the spreading of fires; evaluation of the reliability of experimental data. 4. Study of gas-solid interactions; production of fuel cells; computational fluid dynamics; model of multiphase systems. Materials Engineering Sector: 5. Ceramic and composite materials engineering; thermodynamics and kinetics: rheology of pastes; development of 'green' micro-structures; syntherization, creep and grain growth; complex scale-up systems. 6. Bi-dimensional and interface systems; S-L interface systems of the nano-macro drops type, fluids in capillary tubes, gels; liquids rising under capillary action and condensation; land for vegetable cultivations; osteo-conductivity, elimination and /or transformation of calcium deposits, transport of pharmaceuticals as gels, interaction of low frequency EM fields with surfaces. 7. Engineering of bio-mimetic materials; porous and spongy compounds; frothing; role of surface tension, viscosity and temperature on the formation of cells; mechanical properties and rigidity; technological applications. 8. Durability and re-use of materials; setting, hardening and evaporation of water from pastes; interface reactions; new lime plasters; re-use of the dust of stone materials; dust-ceramic transformation. 9. Analysis of the Life Cycle of products and services (LCA); Carbon strategy; study of processes to reduce CO2 and CDM projects.
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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: Dipartimento di Ingegneria Civile, Chimica ed Ambientale (DICCA), Via all'Opera Pia, 15 - 16145 Genova. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
For further information please contact	Prof. Marco Del Borghi, Dipartimento di Ingegneria Civile, Chimica ed Ambientale (DICCA), Via all'Opera Pia 15, 16145 – Genova, cell. 329 2104469, delborg@unige.it

Doctoral School School of Engineering Sciences and Technologies
Disciplines involved: Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 04 - Earth Sciences, Field 08 - Civil Engineering and Architecture
 Director: Capobianco Massimo
 Access and attendance fees, second instalment: € 300,00

Course in: FLUID MACHINERY ENGINEERING (CODE 4843)

Coordinator: Massardo Aristide	
Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti - DIME)	
Places: 6 - Grants: 3 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 2 (without grant).	
(*) 2 grants from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Expansion and development of the motor industry including two-wheeled vehicles with low fuel consumption and low environmental impact engines"	
Comparative assessment procedure	Qualifications/Publications
Research themes	The research themes of the Doctoral Course in Fluid Machinery Engineering are within the fields of advanced scientific and technological research of the sectors relative to turbomachines, internal combustion engines, components and energy plants.
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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: massa2444@gmail.com The name, status and service place of the referees chosen by the candidates must be stated in their applications.
For further information please contact	for information contact the Coordinator of the Course Prof. Massardo (massardo@unige.it), and colleagues Loredana Magistri (loredana.magistri@unige.it), Alberto Traverso (alberto.traverso@unige.it) e Mario Ferrari (mario.ferrari@unige.it)

Doctoral School**School of Engineering Sciences and Technologies****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 04 - Earth Sciences, Field 08 - Civil Engineering and Architecture

Director:

Capobianco Massimo

Access and attendance fees, second instalment: € 300,00

Course in: ELECTRIC ENGINEERING (CODE 4844)

Coordinator: Massucco Stefano	
Department of Marine, Electric, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN)	
Places: 6 - Grants: 3 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 3 grants from the University	
Comparative assessment procedure	Qualifications/Publications
Research themes	The research themes are in tune with the guidelines of the School of Sciences and Technologies for Industrial Engineering. They concern: (A) Automation: industrial, of processes and transport. Models of producer plants. Management, monitoring and control of electric systems. Innovative techniques and optimisation for the design of electromagnetic devices. Electric working for robotics, manufacturing automation and processes. Advanced applications of instruments and camp buses. (B) Energy: Protection against electrostatic hazards. Evaluation of isolation defects with measurement of partial discharges. Technical and economic evaluations for market energy. Distributed generation. Service quality. Design of switches and magnetic devices for energy storage. Static energy convertors. (C) Electronics: Model systems and electronic power components. Advanced control techniques for converters. Advanced control techniques against electrostatic discharges from electronic devices. Models of complex systems. Analysis and synthesis of circuits and non linear dynamic systems. Neural networks. Electronic systems design. (D) Industrial electromagnetic compatibility: electromagnetic compatibility among electric, power electronic and communications systems. Models, simulations and measuring methods. Numeric current (electric) models of lightning. Electromagnetic models with full Maxwell approach. (E) Transport: Management and control systems of traffic. Models for RAMS forecasting analysis. Electrified systems for public transport. Energy management of electric and hybrid vehicles. Diagnostics for electric traction engines. Electric working for traction on rails, wheels and for marine propulsion. (F) Environment: Numeric simulation and measuring and camp reduction techniques. Optimised design of low emission devices. Systems with low environmental impact.
Further information on how to present qualifications/publications	1. The information in the application and in the curriculum vitae et studiorum, 2. Reference letters (not less than one and not more than three reference letters signed by a university professor or an expert on the subject), 3. the research project, 4. other qualifications/publications, the latter information (points 3 and 4) should not exceed 10 pages each. The research project will be on one of the themes in the list of RESEARCH THEMES. Furthermore: 5. Candidates can submit their applications and documentation only in Italian or English; 6. the dissertation title and a brief description of it; a list of the exams sat, their marks as well as – if available – a brief description of the relative syllabuses (a maximum of 5 lines) is required.
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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: Prof. Stefano Massucco c/o UNIGE-DINAEL, via all'Opera Pia 11a – 16145 Genova o all'indirizzo email stefano.massucco@unige.it The name, status and service place of the referees chosen by the candidates must be stated in their applications.
For further information please contact	Prof. Stefano Massucco, stefano.massucco@unige.it ; tel: +39-010-3532718 Emanuela De Pasquale; emanuela.depasquale@unige.it ; tel: +39-010-35327005

Doctoral School**School of Engineering Sciences and Technologies****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 04 - Earth Sciences, Field 08 - Civil Engineering and Architecture

Director:

Capobianco Massimo

Access and attendance fees, second instalment: € 300,00

Course in: MATHEMATICAL ENGINEERING AND SIMULATION (CODE 4845)

Coordinator: Cianci Roberto	
Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti - DIME)	
Places: 6 - Grants: 3 (*).	
(*) 2 from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research – “Innovative telecommunication wide band systems with the use of satellites for differentiated uses IN the field of safety, prevention and intervention IN the case of natural catastrophes”	
Comparative assessment procedure	Qualifications/Publications
Research themes	Mathematical models for simulation and mathematical programming; simulation techniques for discrete events and theory of control, neural networks. Optimisation issues. Modelling and simulation techniques for the optimisation of production techniques; Support systems for integrated decisions with simulators. Hybrid and combined models; processes of development of federations of simulators applied to complex systems. Development and technical applications of artificial intelligence for the management of the value chain. Data fusion techniques integrated in simulation models for the perception of systems and active subjects. Integrated web technologies. Development and application of models with finite and infinite degrees of liberty, determinist and stochastic. Theory of fields. Diffusion problems and resolving techniques. Variational and numerical techniques; special functions. Numerical methods for differential equations of partial derivatives and their use for biologic and environmental models. Classification of systems, criticality. Hamiltonian techniques for the theory of control. Non-linear systems and circuits; models and synthesis of devices; use of variational methods and methods for the solution of reverse problems in dealing with the information and formulation of models. Models and simulation applied to logistics and to the management of supply chains for decision support; analysis models at strategic level and hybrid intelligent systems for the management of logistic networks. Analysis of queues. Integration with telecommunications networks. Simulations applied to the military sector, tactical and strategic. Development of optimization techniques which work automatically with some simulators; study and implementation of systems of lean production and manufacturing.
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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following email address: cianci@unige.it The name, status and service place of the referees chosen by the candidates must be stated in their applications.
For further information please contact	Prof. Roberto Cianci, Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti (DIME) e-mail: cianci@unige.it

Doctoral School**School of Engineering Sciences and Technologies****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 04 - Earth Sciences, Field 08 - Civil Engineering and Architecture

Director:

Capobianco Massimo

Access and attendance fees, second instalment: € 300,00

Course in: MECHANICAL ENGINEERING (CODE 4846)

Coordinator: Lucifredi Aleramo	
Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti - DIME)	
Places: 8 - Grants: 4 (*)	
(*) 3 grants from the University	
(*) 1 grant finance by the Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti - DIME)	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	12 November 2012, 3 p.m. in the Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti - DIME) (former DIMEC), Via Opera Pia 15A, 16145 Genova On request, the interview may also be done using computers (video conference via SKYPE) by contacting the Prof. Lucifredi (lucifredi@unige.it) in time.
Exam syllabus	The interview will be a discussion of the research project presented and of the qualifications/publications.
Research themes	The Doctoral Course in Mechanical Engineering works within the general research themes which are common in the Doctoral School. For the 28 th cycle: the sector of MECHANICS AND MACHINE CONSTRUCTION proposes: Design, functionality and construction, CAD, CAE, robot and manipulation, switch systems, home automation, modular robots and robots for safety, intelligent mini-vehicles, systems for disassembly, mechanical behaviour of materials, environmental and compatibility and recycling, pneumatics, oleo dynamics, mechanical and mechatronic systems, motor cars, 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. The sector of TECHNICAL PHYSICS proposes: thermodynamic analysis of energy systems. Energy sources, vectors and rational use of energy. Environmental impact of energy systems. Mono and multiphase thermo fluid dynamics. Thermo physical properties of materials. Increase in the effectiveness of thermo fluid dynamic processes. Components, thermo technical and air-conditioning plants. Physics of buildings and environmental control. Lighting techniques and applied acoustics. TECHNOLOGIES AND PRODUCTION MANAGEMENT proposes: Industrial Technology, production, control e working of materials, production of moulds for injection moulding of polymeric materials. Welding techniques. Macro and micro-structural analysis of materials. Coupling with structural adhesives. Management of production processes. Enterprise resource planning. Forecasting systems and statistics. Control Processes of Lean Manufacturing, Models, production, assembly. Allocation, constraint and distribution problems, optimization of sequences, DEA techniques, SPC techniques, stochastic models for SCM, data mining for CRM and distribution of services, simulated annealing, tabu search, optimal solutions in logistics and productivity.
Further information on how to present qualifications/publications	QUALIFICATIONS/PUBLICATIONS MUST ALSO CONTAIN A DETAILED DESCRIPTION AND PLANNING OF THE DEVELOPMENT OF A FEASIBLE RESEARCH PROJECT in order to evaluate the candidate's capacity to organise and carry out research. Should s/he be admitted to the doctoral course, s/he shall carry out his/her research within the chosen research theme for the project, but not necessarily on the specific activities described in his/her 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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: lucifredi@unige.it . The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English (foreigners must also prove their knowledge of Italian)
For further information please contact	Prof. Aleramo Lucifredi, tel. 010/3532851 e-mail: lucifredi@unige.it .

Doctoral School**School of Engineering Sciences and Technologies****Disciplines involved:**

Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 04 - Earth Sciences, Field 08 - Civil Engineering and Architecture

Director:

Capobianco Massimo

Access and attendance fees, second instalment: € 300,00

Course in: MARINE ENGINEERING (CODE 4847)

Coordinator: Bruzzone Dario	
Department of Marine, Electric, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN)	
Places: 4 - Grants: 2 (*)	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 1 grant from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Shipbuilding, aeronautics, helicopter engineering with a high foreign market penetration capacity"	
Comparative assessment procedure	Exams (written test and interview)
Written test	8 November 2012, 9:30 a.m., at the Department of Marine, Electric, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN) - polo Navale (former DINAV) via Montallegro, 1 - 16145 Genova
Interview	9 November 2012, 11 a.m., at the Department of Marine, Electric, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni - DITEN) - polo Navale (former DINAV) via Montallegro, 1 - 16145 Genova
Exam syllabus	The written test will concern a topic linked to the research themes listed below. The oral test will be a discussion and analysis of the written test and of the themes of the course. Both tests are aimed at ascertaining the candidate's aptitude for scientific research and his/her level of knowledge of the disciplinary field of the doctoral course. At the end of the interview, knowledge of English will be ascertained.
Research themes	<ul style="list-style-type: none"> - Use of combined gas/steam plants in marine propulsion systems. - Structural optimization in static and dynamic conditions of super yachts in steel and light alloys. - Use of sea keeping methods to determine the loads to be applied to a hull fem model. - Dynamic prediction of the ship in dominating time with sea keeping and station keeping methods. - Hydroelastic solution methods for the viscous cavitating flow around surface-piercing hydrofoil. - Development and application of SPH methods for the prediction of ship dynamics in undulatory sea motion. - Basic project method integrated with the optimization of global characteristics and of the shape of the hull for fast mono and multihulls. - Optimization of the ship's operative efficiency. - Integrated system for the automatic control and stabilization of the ship's motions. - Development of innovative 'business intelligence' techniques for the management of operative ship data and the automatic extraction of decisional trends/rules. - Maritime transport safety in coastal and ocean waters. - Uncertainties regarding the characterization of the final resistance of the hull beam. - Prolonging the operative life of off-shore platforms beyond the projects life span. - Motion study of ships and multihulls through the development of non-linear methodologies in time domain. - Application of RANSE codes to study ship manoeuvrability. - Study of cavitating phenomena of marine propellers and of their effect in terms of induced pressure and radiated noise. - Experimental characterization of non conventional propellers. - Development methods of the simulation of ships with dynamic positioning system. - Coupling of "meshless" methodologies to contour elements for the analysis of strictly non linear dynamic phenomena in undulatory motion.
Foreign languages	English
For further information please contact	Prof. Dario Bruzzone tel. 010/3532427 fax 010/3532127, Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN)- polo Navale e-mail: bruzzone@dinav.unige.it .

Doctoral School **School of Engineering Sciences and Technologies**
Disciplines involved: Field 09 - Industrial and Computer Engineering, Field 01 - Mathematical and Computer Sciences, Field 02 - Physical Sciences, Field 04 - Earth Sciences, Field 08 - Civil Engineering and Architecture
 Director: Capobianco Massimo
 Access and attendance fees, second instalment: € 300,00

Course in: STRUCTURAL AND GEOTECHNICAL ENGINEERING (CODE 4848)

Coordinator: Lagomarsino Sergio	
Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale - DICCA)	
Places: 6 - Grants: 3 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 2 grants from the University	
(*) 1 grant as per Ministerial Decree 198/03 main field of research "Advanced materials (in particular ceramic) for structural applications"	
Comparative assessment procedure	Qualifications/Publications and Interview
Interview	8 November 2012, 10 a.m. in the Baldacci Library of the Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria civile, chimica e ambientale - DICCA), via Montallegro, 1 16145 Genova The interview may also take place by telematic means (Skype or other) to be arranged beforehand with the Examining Commission.
Exam syllabus	A discussion of qualifications and the research project proposed by the candidate.
Research themes	The research themes of the Doctoral Course include the typical topics of structural and geotechnical engineering, in particular: the mechanics of solids, the mechanics of materials, the mechanics of structures and soils; biomechanics; the dynamics, monitoring, identification and control of structures; seismic and wind engineering; the mechanics of reinforced-concrete, steel, brickwork, wood and earth constructions; the safeguarding and consolidation of constructions; the planning of foundations, of supporting structures and excavations; the stability of natural slopes. Within these themes and taking into consideration the particular skills and knowledge present in the Department and of the Teaching Body, five sectors are dealt with in particular – the mechanics of composite materials, the mechanics of masonry, seismic engineering, wind engineering and engineering of foundations – where the Department is a reference point at national and international levels. The PhD in Structural and Geotechnical Engineering also proposes to favour and develop research themes characterized by strong transversal ties with the lines of the other Doctoral Research Courses of the Doctoral School in Science and Technologies for Engineering. Among these, the following deserve special mention: materials, biomechanics, seismology and climatology, the risk associated to natural events, aerodynamics and experimental methods in wind galleries, the production of wind energy, monitoring and control techniques, infiltration phenomena in unsaturated soils.
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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course: Prof. Sergio Lagomarsino, Dipartimento di Ingegneria civile, chimica e ambientale (DICCA), Via Montallegro 1, 16145 GENOVA. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages:	Candidates must prove their knowledge of English during the interview (foreign candidates must also prove their knowledge of Italian).
For further information please contact	Prof. Sergio Lagomarsino – DICCA - Via Montallegro, 1 16145 Genova tel: 010/3532521 e-mail: sergio.lagomarsino@unige.it

Doctoral School **School of Human Sciences**
Disciplines involved: *Field 11- Historical, Philosophical, Pedagogic and Psychological Sciences*
 Director: Penco Carlo
 Access and attendance fees, second instalment: € 25,00

Course in: PHILOSOPHY (CODE 4849)

Coordinator: Campodonico Angelo	
Department of Ancient Times, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia -DAFIST)	
Places: 4 - Grants: 2 (*).	
(*) 2 grants from the University	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
Comparative assessment procedure	Exams (written test and interview)
Written test	5 November 2012, 9 a.m., in the Aula Magna of the polo didattico in Via delle Fontane, 10 (near Piazza della Nunziata and Piazza S. Sabina) - 16124 Genova.
Interview	9 November 2012, 9 a.m. in the in the Library of the Department of Philosophy (Dipartimento di Filosofia - DIF) in Via Balbi 4 - 1st floor - 16126 Genova.
Exam syllabus	The written test will be a paper on a fundamental topic concerning the different fields of philosophy (epistemological, theoretical, ethical, etc.) The interview will concern the themes dealt with in the written test and the research project the candidates proposes to work on during the PhD.
Research themes	Philosophy of the intercultural and interreligious dialogue; Hermeneutics, semiotics, religion and politics in Kant; Heidegger and hermeneutics; Contemporary philosophy and theology; Construction and interpretation of the aesthetic object; Ontological and metaphysical issues linked to the development of scientific thought; The issue of contextual dependence: language and knowledge; History and philosophy of medicine issues; Feminist epistemologies; Philosophy of the mind, philosophy of psychology and cognitive sciences; Rationality and modernity in ethical and political discourse; Liberalism from the origins to the present day; Feminism and political philosophy; Bioethical issues; Aristotelian ethical and anthropological tradition; Personalism and metaphysics in contemporary philosophy; Philosophic historiography and its history; History of Christian philosophy form the Restoration period to the Second Vatican Council;
Foreign languages	English or French or German or Spanish
For further information please contact	Prof.ssa Valeria Ottonelli, e-mail vottonel@nous.unige.it

Doctoral School **School of Human Sciences**
Disciplines involved: Field 11- Historical, Philosophical, Pedagogic and Psychological Sciences
 Director: Penco Carlo
 Access and attendance fees, second instalment: € 250,00

Course in: PSYCHOLOGY, ANTHROPOLOGY AND COGNITIVE SCIENCES (CODE 4850)

Coordinator: Greco Alberto	
Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR)	
Places: 4 - Grants: 2 (*).	
(*) 2 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	7 November 2012, 9 a.m., at the Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR) corso Andrea Podestà 2, 16128 Genova
Interview	8 November 2012, 3 p.m., at the Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR) corso Andrea Podestà 2, 16128 Genova
Exam syllabus	The written test will be a paper on the theoretical and methodological aspects of the relevant subject areas (psychology, anthropology, cognitive sciences) or on the preparation of a research project on the same subjects, also with reference to the research reported in literature or of which the candidate has direct experience. The interview will be: (a) a discussion of the candidate's paper and of any publications or study and research experience relevant to the doctoral specialization; (b) the opinions and any experience the candidate has already acquired concerning the line of research s/he intends to pursue; (c) general methodological aspects of research and data analysis techniques in the subject fields referred to. During the interview the candidate's knowledge of English will be tested.
Research themes	1. Attention models. Executive control processes in adults and in typical and atypical development. Attention deficits. 2. Memory work models. Capacity, processing, strategy limitations. 3. Neo-Piagetian models of cognitive development. 4. Normal and abnormal development of language. 5. Learning to read and write. Mathematical and scientific education. Predictors of learning disabilities. 6. Simulation models of psychic processes. 7. Development and validation of psychological tests for the evaluation of personalities and individual differences. 8. Mentalization: typical and atypical development, transgenerational transmission, psychopathology and treatment. 9. Psychodynamic models of clinical psychological assessment. The process and outcomes of psychotherapies. Emotional regulation and dysregulation during childhood/adolescence and adulthood. 10. Families and disabilities. 11. Eating behaviour. 12. Basic research in anthropology (biologic anthropology, ageing). Human evolution (phylogenesis of language). 13. Health Anthropology (medical anthropology, ethnomedicine, pleasure/pain). Anthropopoiesis (humanization devices, nature/culture bond). 14. Cognitive ergonomics, human factors. 15. Ageing, measurement of cognitive functions and rehabilitation. Development of cognitive systems to support the elderly and disabled people. 16. Cognitive analysis of the business culture, distance learning, transfer of knowledge, task analysis of work activities. Organizational safety and wellbeing.
Foreign languages	English
For further information please contact	Prof. Alberto Greco, tel. 010 209 9852, oppure 010 209 9846, e-mail: greco@unige.it Person in administration: Mrs Maria Luisa Cesarano, tel. 010 209 53609, email: cesarano@unige.it

Doctoral School **School of Human Sciences**
Disciplines involved: Field 11- Historical, Philosophical, Pedagogic and Psychological Sciences
 Director: Penco Carlo
 Access and attendance fees, second instalment: € 250,00

Course in: POLITICAL SCIENCE
Specialization: DEMOCRACY AND HUMAN RIGHTS (CODE 4851)

Coordinator: Falchi Maria Antonietta	
Department of Political Sciences (Dipartimento di Scienze Politiche - DISPO)	
Places: 2 - Grants: 1 (*).	
(*) 1 grant from the University	
Comparative assessment procedure	Qualifications/Publications and Exams (qualifications/publications, written test and an interview)
Written test	8 November 2012, 10 a.m. in the Department of Political Sciences (Dipartimento di Scienze Politiche – DLS.PO), Largo Zecca 8/16 (6th floor), 16124 Genova
Interview	9 November 2012, 10 a.m. in the Department of Political Sciences (Dipartimento di Scienze Politiche – DLS.PO), Largo Zecca 8/16 (6th floor), 16124 Genova.
Exam syllabus	Written test: The candidates will be asked to write a paper dealing with, in general, themes relating to democracy and human rights within a historic, philosophical, political, juridical-constitutional and juridical-internationalist point of view, according to the distinctive methodological perspective of one or more of the scientific areas of reference. Interview: the interview will be a discussion of the candidate's paper and of any publications or previous study and research experience, as indicated in the curriculum, as well as the research programme presented with reference to the themes of the doctoral field of research.
Research themes	The research themes of the course will be the rules, regulations and workings of democratic institutions, human rights and the juridical instruments for their defence. These themes will be dealt with from a multidisciplinary perspective, but they can be divided into three main basic cultural lines. The historical-philosophical-political line of research will deal with the historical and semantic evolution of the concepts of "democracy" and "human rights" and will examine the origins, development and metamorphosis of these concepts from a general historical and philosophical perspective (sector M-STO/02) as well as their distribution, also in relation to other indicators of socio-economic and human development (sector SPS/02). The juridical-constitutional line of research will examine democratic institutions, through the instruments of constitutional law, in particular through the study of (from a perspective of general theory and positive European, national and comparative law) of regimes and government systems, territorial allocation of public powers, constitutional rules and regulations of rights (freedom and social), instruments – also procedural – to guarantee the Constitution and human rights (sectors IUS/08,09,21,07,15). The juridical-international line of research will investigate both the system of international defence of human rights and its specific aspects in the European framework: the ECHR system (set in the context of the international protection system and by examining the relationships of internal legal systems), the system of the European Union (from the dual point of view of internal and external action and the relations of both with the theme of fundamental human rights), and the interactions between the two systems (ECHR and EU); these themes will be developed both in the light of the present situation and from the perspective of the Lisbon Treaty (sector IUS/14).
Further information on how to present qualifications/publications	Candidates may submit documentation relative to any publications that will be evaluated by the examining Commission for the final score. Candidates must attach a detailed research project based on the Doctoral themes to their online 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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following email address: mbottaro@unige.it . The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	During the interview, Italian candidates must show their knowledge of English and of another among the following languages: French, German, Spanish. These languages may be used for the written test and the interview. Foreign candidates must also show their knowledge of Italian.
For further information please contact	Coordinator: prof.ssa Maria Grazia Bottaro Palumbo, Dipartimento di Ricerche Europee (DIRE), Tel. 0102099056, e-mail: mbottaro@unige.it Administration contact person: dott.ssa Patrizia Fusi, Dipartimento di Ricerche Europee (DIRE), Tel. 0102095250, e-mail patrizia.fusi@unige.it

Doctoral School **School of Human Sciences**
Disciplines involved: *Field 11- Historical, Philosophical, Pedagogic and Psychological Sciences*
 Director: Penco Carlo
 Access and attendance fees, second instalment: € 250,00

Course in: SCIENZE POLITICHE
Specialization: POLITICAL THOUGHT AND POLITICAL COMMUNICATION (CODE 4852)

Coordinator: Falchi Maria Antonietta	
Department of Political Sciences (Dipartimento di Scienze Politiche - DISPO)	
Places: 2 - Grants: 1 (*).	
(*) 1 grant from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	6 November 2012, 9:30 a.m., in the Department of Political Sciences (Dipartimento di Scienze Politiche – D.I.S.PO), largo Zecca 8/16 (VI piano) Genova.
Interview	7 November 2012, 3 p.m., in the Department of Political Sciences (Dipartimento di Scienze Politiche – D.I.S.PO), largo Zecca 8/16 (VI Piano), Genova
Exam syllabus	Written test: The candidates will be asked to write a paper dealing with, in general, themes, ideologies and /or clusters of social-political values which, in the past or present, have been the object of theoretical design and programmes of collective action. The main outline may be developed following the point of view and according to the methodological perspectives of one (or possibly more) of the following scientific disciplines: SPS/01- Political Philosophy; SPS/02- History of Political Doctrines; SPS/03- History of political institutions; SPS/04- Political Science; SPS/07- General Sociology; SPS/08- Sociology of Cultural and Communicative Processes; L-LIN/12 Language and Translation – English Language (with particular reference to English language sources). Interview: The interview will be a discussion of the candidate’s paper and of any publications or previous study and research experience, indicated in the “curriculum”, as well as the research programme presented with reference to themes of the doctoral field of research. During the interview the candidate’s knowledge of English and of any other foreign language indicated by the candidate will be tested.
Research themes	Political projects and their communication in the history of social and political ideas; Communication codes and communicative strategies of political projects; Communication of political projects and/or political programmes in sociological theory; Political and sociological communicative aspects of political projects in the contemporary world.
Foreign languages	During the interview, Italian candidates must prove their knowledge of English. Foreign candidates must also prove their knowledge of Italian.
For further information please contact	Contact Professor: prof Alberto De Sanctis, tel.0102099064; Alberto.DeSanctis@unige.it Administration contact person: dott.ssa Patrizia Fusi – telefono: 010 2095250 – indirizzo e-mail: patrizia.fusi@unige.it

Doctoral School **School of Human Sciences**
Disciplines involved: *Field 11- Historical, Philosophical, Pedagogic and Psychological Sciences*
 Director: Penco Carlo
 Access and attendance fees, second instalment: € 250,00

Course in: POLITICAL SCIENCE
Specialization: HISTORY, POLITICS AND LANGUAGES OF CROSSCULTURAL RELATIONS (CODE 4853)

Coordinator: Falchi Maria Antonietta	
Department of Political Sciences (Dipartimento di Scienze Politiche - DISPO)	
Places: 2 - Grants: 1 (*).	
(*) 1 grant from the University	
Comparative assessment procedure	Qualifications/Publications and Exams (qualifications/publications, written test and an interview)
Written test	12 November 2012, 10:30 a.m., in the meeting room of the Department of Political (Dipartimento di Scienze Politiche– D.L.S.P.O.), largo Zecca 8/16 (6th floor), 16124 Genova.
Interview	13 November 2012, 10:30 a.m., in the meeting room of the Department of Political (Dipartimento di Scienze Politiche– D.L.S.P.O.), largo Zecca 8/16 (6th floor), 16124 Genova.
Exam syllabus	Written test: a paper on an outline drawn from the three prepared by the Commission. The outlines will concern the issues associated with crosscultural societies from the perspective of sociology, socio-politology, language, history or philosophy. Candidates will have two hours. Interview: the interview will be a discussion of the candidate's paper, the research project presented and of any publications or previous study and research experience indicated in the curriculum.
Research themes	The specialization in History, Politics and Languages of Crosscultural Relations, within the theoretical framework of the Doctoral Course in Political Science, focalizes on the specific research theme i.e. intercultural relations from a historical, linguistic and socio-political perspective. The variety of intercultural relations is explored and analysed following the implications that the dynamics of transformation of contemporary European society have an "ego-alter" relationship in micro, meso and macro-sociological terms. Special attention is given to the process of political inclusion of immigrants within local contexts and to the elaboration of new post-national political identities. The methodological perspective adopted synergically combines theoretical reflection with comparative empirical research.
Further information on how to present qualifications/publications	Candidates may submit documentation relative to any publications that will be evaluated by the examining Commission for the final score. Candidates must attach a detailed research project based on the Doctoral themes to their online application.
Information on references	Candidates are not required to present reference letters.
Foreign languages	During the interview Italian candidates must show they have knowledge of either English, French, or Spanish.
For further information please contact	Contact Professor: Prof. Andrea Pigni (andrea.pigni@unige.it – tel. 010 2099061). Administration contact person: dott.ssa Patrizia Fusi (patrizia.fusi@unige.it – tel. 010 2095250).

Doctoral School **School of Human Sciences**
Disciplines involved: *Field 11- Historical, Philosophical, Pedagogic and Psychological Sciences*
 Director: Penco Carlo
 Access and attendance fees, second instalment: € 250,00

Course in: SOCIOLOGY (CODE 4854)

Coordinator: Stagi Luisa	
Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR)	
Places: 6 - Grants: 3 (*).	
(*) 3 grants from the University	
Comparative assessment procedure	Exams (written test and interview)
Written test	12 November 10 a.m., in the aula dottorandi, piano amezato, Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR), corso Podestà 2 - 16128 Genova
Interview	13 November, 9 a.m., in the aula dottorandi, piano amezato, Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR), corso Podestà 2 - 16128 Genova
Exam syllabus	The tests are mainly to evaluate the candidate's aptitude for scientific research and knowledge of social research methodology as well as the main theoretical references to the chosen research theme.
Research themes	Sociology, Sociology of cultural and communication processes, Sociology of deviance, Methodology of social research, Sociology of migrations, International Sociology, Visual Sociology, Sociology of the body, Military sociology, Sociology of work, Sociology of education, Sociology of the family, Welfare sociology, Gender studies.
Foreign languages	Adequate knowledge of English or French is required and will be tested during the exam.
For further information please contact	Luisa Stagi, luisa.stagi@unige.it , Luca Guzzetti, luca.guzzetti@unige.it

Doctoral School Scuola di Società, culture, territorio
Disciplines involved: Field 11- Historical, Philosophical, Pedagogic and Psychological Sciences, Field 04 - Earth Sciences, Field 05 - Biological Sciences, Field 08 - Civil Engineering and Architecture, Field 10 - Antiquities, Philological-Literary and Historical and Artistic Sciences, Field 14 - Political and Social Sciences
 Director: Assereto Giovanni
 Access and attendance fees, second instalment: € 500,00

Course in: MIGRATIONS AND CROSSCULTURAL PROCESSES (CODE 4856)

Coordinator: Renza Cerri	
Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR)	
Places: 4 - Grants: 2 (*).	
(*) 2 grants from the University	
Comparative assessment procedure	Qualifications/Publications and Exams (qualifications/publications, written test and an interview)
Written test	6 November 2012, 9 a.m., at the Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR) - Corso Andrea Podestà, 2 – 16128 Genova
Interview	7 November 2012, 3 p.m., at the Department of Education Sciences (Dipartimento di Scienze della Formazione - DISFOR) - Corso Andrea Podestà, 2 – 16128 Genova
Exam syllabus	Written test: candidates will write a paper concerning, in general, the research themes and reference models of the theories on migration with particular reference to identity processes and the relationships among cultures, bilingual/plurilingual processes, acculturation and the various phenomena linked to it in the psychological and pedagogic fields (in the family, at work, in school, socially). The outline can be developed from the point of view and according to the characteristic methodological perspectives of one (and possibly of more than one) of the following scientific topical sectors: M-PSI/05, M-PED/01, M-PED/02, M-PED/03, M-GGR/01, SPS/08, L-LIN/07. The interview will be a discussion of the candidate's paper, of any publications or previous study and research experience, as indicated in the "curriculum". During the interview the candidate's knowledge of their chosen foreign language will be tested.
Research themes	General features and reference models of theories on migration, cultural processes and self-construction: development processes of ethnic identities, analysis of the relations in ingroup and outgroup relationships; cultural differences and acculturation processes. Childhood and migration: children's rights and forms of protection for foreign children. Migrant adolescents: identity construction processes and risk indicators, inter-religious issues. Gender differences: female migrations, resilience processes and coping strategies. Families: new identities, mixed families and couples; the development of identity processes and conflicting situations. Work: integration and mediation for the introduction of immigrant adolescents and foreign women. Structures and organization: reception competences of the structures; integration of foreign minors in the school system; international cooperation and sustainable tourism to learn about and strengthen the development of local situations in the Southern Countries of the world. Situations of wellbeing/discomfort: role of ethnic networks. Emergency ethnography: cultural specificity of immigrants in conditions of hardship and pathology. Pedagogical approach and educational interventions. Learning processes and social interaction in relation to technologies. Interculture and teacher training. The contribution of geographical sciences to the studies of population movements, focusing on immigration in Europe, Italy and Liguria. Analysis of the changes that have taken place in the countries of origin following great migratory movements.
Further information on how to present qualifications/publications	Besides English and Italian required for in the general public notice of exam, candidates may also submit their applications and documentation in French and Spanish.
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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: Dipartimento di Scienze della Formazione (DISFOR), Corso A. Podestà 2, 16128 Genova. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	Italian candidates must show they have knowledge of English during the interview, or, alternately, of French or Spanish. Foreign candidates must show they have good knowledge of Italian.
For further information please contact	Prof.ssa Renza Cerri, Coordinator of the Doctoral School (tel. 010.209.53607, e-mail: renza.cerri@unige.it); Prof. Giovanni Assereto, Director of the Doctoral School (tel. 010.209.98.29, e-mail: giovanni.assereto@lettere.unige.it)

Doctoral School Scuola di Società, culture, territorio
Disciplines involved: *Field 11- Historical, Philosophical, Pedagogic and Psychological Sciences, Field 04 - Earth Sciences, Field 05 - Biological Sciences, Field 08 - Civil Engineering and Architecture, Field 10 - Antiquities, Philological-Literary and Historical and Artistic Sciences, Field 14 - Political and Social Sciences*
 Director: Assereto Giovanni
 Access and attendance fees, second instalment: € 500,00

Course in: HISTORY
Specialization: HISTORICAL GEOGRAPHY FOR THE ENHANCEMENT OF THE HISTORICAL AND ENVIRONMENTAL HERITAGE (CODE 4857)

Coordinator: Vangelista Chiara	
Department of Ancient Times, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia -DAFIST)	
Places: 2 - Grants: 1 (*)	
(*) 1 grant from the University	
Comparative assessment procedure	Qualifications/Publications and Exams (qualifications/publications, written test and an interview)
Written test	7 November 2012, 9 a.m., at the Department of Ancient Times, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia -DAFIST), Via Balbi 6, 16126 Genova.
Interview	8 November 2012, 2 p.m., at the Department of Ancient Times, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia -DAFIST), Via Balbi 6, 16126 Genova.
Exam syllabus	The written test will consist in a paper to be done within four hours. The theme (which will be drawn just before the exam), will deal with general thematic aimed at highlighting the candidate's knowledge, analytical skills and methodological tools. Contents of the interview. The interview will be a discussion of: 1) the paper; 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. The candidate's curriculum vitae et studiorum and his/her qualifications/publications will be discussed during the interview. During the interview, the candidate's historical and geographical knowledge as well as his/her analytical skills and aptitude for research will also be verified.
Research themes	The historical geographic specialization for the enhancement of the historical and environmental heritage of the PhD intends to develop methodologies and analytical skills aimed at investigating areas and sites of historical and environmental interest, that is topographically defined spaces where it is still possible to document cultural landscapes of the past and activation practices of resources or where these practices can be reconstructed through the material traces on the land and by means of other historical sources. The competences deal with both on the field work and the deciphering of textual sources (from archives, literary and iconographic). All these research techniques are aimed at the identification of cultural landscapes and the enhancement of the rural and historical-environmental heritage, with special attention to the European reference framework. Therefore the research themes will have to be coherent with this approach. The research activities, multidisciplinary in character, are carried out in the Laboratory of Archaeology and Environmental History (L.A.S.A.) and in the Permanent Seminary of Local History (SEMPER). The L.A.S.A. is divided into two divisions: the geographic and historical division at the Department of Modern and Contemporary History (DISMEC); the botanical division, at the Department for the Study of the Territory and its Resources (DIPTERIS). The laboratory has been functioning since the academic year 1995-1996, with didactic and research functions, which develop thanks to the organization of international seminars and yearly field campaigns besides the normal activities of an archeo-botanical laboratory. The field activities are carried out above all in the rural areas of North-Western Italy, with the collaboration of Italian and European research centres, interested in the themes of environmental and rural archeology, historical ecology and rural heritage. At the same time the research activity includes the analysis of archive document sources, which come from different storehouses (the State Archives of Genoa, the Historical Archive of the Municipality of Genoa, local archives, parish archives, family archives ...), with special reference to the historical territorial sources (cartography, land registers, cabrei).
Further information on how to present qualifications/publications	Besides the qualifications/publications requested in the public notice exam, candidates are requested to submit together with their applications, a) the four year degree thesis, or specialist, or II level degree thesis (in pdf format); b) a synthetic description of the research project proposed by the candidate (maximum 8000 characters plus the bibliography). Candidates must send a copy of their thesis and any publications to the attention of Prof. Osvaldo Raggio at the Dipartimento di Antichità, Filosofia, Storia (DAFIST), via Balbi, 6, 16126 Genova.
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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: Prof.ssa Chiara Vangelista, Dipartimento di Antichità, Filosofia, Storia (DAFIST), Via Balbi 6, 16126 Genova. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English
For further information please contact	Osvaldo Raggio (e-mail: osvaldo.raggio@lettere.unige.it)

Doctoral School**Scuola di Società, culture, territorio****Disciplines involved:**

Field 11- Historical, Philosophical, Pedagogic and Psychological Sciences, Field 04 - Earth Sciences, Field 05 - Biological Sciences, Field 08 - Civil Engineering and Architecture, Field 10 - Antiquities, Philological-Literary and Historical and Artistic Sciences, Field 14 - Political and Social Sciences

Director:

Assereto Giovanni

Access and attendance fees, second instalment: € 500,00

Course in: HISTORY**Specialization: HISTORY (CODE 4858)**

Coordinator: Vangelista Chiara	
Department of Ancient Times, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia -DAFIST)	
Places: 4 - Grants: 2 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 2 grants from the University	
Comparative assessment procedure	Qualifications/Publications and Exams (qualifications/publications, written test and an interview)
Written test	7 November 2012, 9 A.M., at the Department of Ancient Times, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia -DAFIST), Via Balbi 6, 16126 Genova.
Interview	8 November 2012, 2 p.m., at the Department of Ancient Times, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia -DAFIST), Via Balbi 6, 16126 Genova.
Exam syllabus	The written test will be a paper, to be done within four hours. The essay title (which will be drawn there and then, one for candidates doing Modern History, one for candidates doing Contemporary History) still be on general themes aimed at highlighting the candidates' knowledge, analytical skills and methodological tools. The contents of the interview will be: 1) the paper; 2) the candidate's research project; 3) the capacity to understand a passage from a history text, chosen by the commission, in the foreign language chosen by the candidate.
Research themes	Within the general and interwoven multidisciplinary themes which are the basis of the doctoral school, the course in history, Modern and Contemporary History specialization, naturally stresses the diachronic perspective of the long and medium term periods, that is it aims at studying continuity and interruptions in the history of western societies in the modern age, contemporary age and in local histories (in the latter case, from the ethno-anthropological point of view) defining the nature and rhythm of the changes, their capacity to maintain and remodel aspects of the past or their tendency to wipe them away, in a plot in which the history of the environment, of human practices and cultures, of politics as management of power, interact. In particular the link between continuity and discontinuity is evoked within the relationships among history and memory and the public use of history which is the emerging theme for reflection on contemporary societies, also because of its importance in the definition and remodelling of collective identities. Within the general themes of the school and the specific ones of the History Course, the setting up of a research line strictly based on contemporary history has been envisaged. The research line re-proposes, with limitations, the specializations of the PhD in contemporary history, named in various ways, set up in the 17 th cycle, with connections and comparisons between a course of American studies and a tradition of contemporary studies. Central to the doctoral course are the aspects of social history linked to the advent of mass society, founded on the collection and study of new sources (such as the private documents of ordinary people and iconographic sources with mass circulation), the phenomena of geographic and social and transnational mobility (migrations with special reference to the North and South American origin), the characteristics of Euro-Atlantic relations, the investigative perspectives open to a history genre increasingly fertile with interpretative suggestions fundamental for the understanding of our time, ethno history. Along with temporary history, there is a course of Modern History whose lines of research concern the history of Modern Europe in its different parts. More specific themes concern the field of political-institutional history, the history of territory, maritime history, military history, cultural and religious history, with special attention to Italy but not only, and to the enhancement of the documentation heritage they refer to. As far as the cultural-anthropological field is concerned, the reference themes are essentially linked to the meeting of individuals from different geographic areas and cultures. Special attention will be given to the analysis of relations that are established at a cultural, political, economic and juridical level among individuals and new contexts of residence in the form of local communities and on the nation-state plane. Therefore, the cultural dynamics, which come about following global migratory fluxes, which not only involve the circulation of individuals, but also that of ideas and forms of perception, which give life to imagination, ties and structural relations and new expressive forms, will be examined.
Further information on how to present qualifications/publications	Besides the qualifications/publications requested in the public notice exam, candidates are requested to submit together with their applications, a) the four year degree thesis, or specialist, or II level degree thesis (in pdf format); b) a synthetic description of the research project proposed by the candidate (maximum 8000 strokes plus the bibliography). Besides English and Italian required for in the general public notice of exam, candidates may also submit their applications and documentation in French, Spanish and Portuguese.
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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: Prof.ssa Chiara Vangelista, Dipartimento di Antichità, Filosofia, Storia (DAFIST), Via Balbi 6, 16126 Genova. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English, French, Spanish, Portuguese.
For further information please contact	Prof. Giovanni Assereto, tel. 010.209.98.29, gioasser@unige.it .

Doctoral School**Scuola di Società, culture, territorio****Disciplines involved:**

Field 11- Historical, Philosophical, Pedagogic and Psychological Sciences, Field 04 - Earth Sciences, Field 05 - Biological Sciences, Field 08 - Civil Engineering and Architecture, Field 10 - Antiquities, Philological-Literary and Historical and Artistic Sciences, Field 14 - Political and Social Sciences

Director:

Assereto Giovanni

Access and attendance fees, second instalment: € 500,00

Course in: HISTORY AND PRESERVATION OF THE ARTISTIC AND ARCHITECTURAL HERITAGE (CODE 4855)

Coordinator: Magnani Lauro Giovanni	
Department of Italian and Romance languages, Classical Studies, Arts and Performing Arts (Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo - DIRAAS)	
Places: 4 - Grants: 2 (*).	
Places in excess reserved for non-EU citizens who reside abroad: 1 (without grant).	
(*) 2 from the University	
Comparative assessment procedure	Qualifications/Publications and Exams (qualifications/publications, written test and an interview)
Written test	6 November 2012, 9 a.m., at the Department of Italian and Romance languages, Classical Studies, Arts and Performing Arts (Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo - DIRAAS), arts section library, 3rd floor, Via Balbi 4 – 16126 Genova
Interview	8 November 2012, 9 a.m., at the Department of Italian and Romance languages, Classical Studies, Arts and Performing Arts (Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo - DIRAAS), arts section library, 3rd floor, Via Balbi 4 – 16126 Genova
Exam syllabus	The written test will consist in a paper, to be done within four hours, on the basis of an outline drawn by the candidates from a list of three titles prepared by the Commission on general issues – relative to the study and analysis of the artistic-architectural heritage and its preservation - aimed at highlighting the candidates' knowledge, analytical skills and methodological tools. Contents of the interview. The interview will be a discussion of: 1) the paper; 2) the candidate's research project; 3) the capacity to understand a passage from a historical-artistic text or on a theme relative to cultural heritage, chosen by the Commission, in the foreign language chosen by the candidate.
Research themes	1. The overall scope of the research proposals is directed to the study of the artistic and architectural heritage and to the analysis of the problems 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 the following lines which constitute the curricular basis of the doctoral course have emerged: a. analysis of the artistic and architectural item and its relations with the territory with special reference to the European area and its Mediterranean projection; b. analysis of the spreading 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 and communication phenomena by artistic means; 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 among production centres, institutions and the territory; models and replicas, centre and outskirts; i. analysis of technical processes in defining the 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. 2. It should be noted that this framework is possible having joined within the doctoral project didactic and differentiated scientific situations in a Teaching Body made up of scholars of the history of architecture and of the territory and of history of art, in a particularly organized range of skills, as much from the plane of the chronological scope (from the Middle Ages to the Modern Age), as from that of specific professionalisms (historians of art, of architecture, urban studies; architect supervisors and officials or historians of art of the Department of National Heritage and Cultural Activities); this makes it possible to carry out a particularly organized didactic and research project, aimed at the training of workers in the sector of history and preservation of artistic items capable of responding completely to the needs that these issues imply in their territorial relations. Through the research themes of the PhD, the aim is to propose and innovate, with the contribution of young scholars, the experience of a line of study which finds in the University of Genoa an internationally recognised tradition, together with a close relationship with the cultural production of the city, constantly checked by the production of studies and by the care of exhibition activities which have traced a long itinerary in the last fifty years, dedicated to the reassertion of the importance of the city's historical and architectural cultural heritage and its exemplariness in the relationship with social and political dynamics. 3. In this sense the aim is also to propose the exceptionality of the cultural heritage of the Genoese University – so intimately linked to the historical and urban dimension of the city, to the decorative and historically communicative strategies processed in the framework of European relations – as the subject-matter of the research for which the doctoral course can experiment didactic/operative models to which the interest of Italian and foreign scholars will be directed, always within the perspective of a wide interdisciplinary vision.
Further information on how to present qualifications/publications	Besides the qualifications/publications requested in the public notice exam, candidates are requested to submit together with their applications, a) the four year degree thesis, or specialist, or II level degree thesis (in pdf format); b) a synthetic description of the research project proposed by the candidate (maximum 8000 strokes plus the bibliography). Besides English and Italian required for in the general public notice of exam, candidates may also submit their applications and documentation in French.
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 the reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: Prof. Lauro Magnani, DIRAAS, Via Balbi 4, 16126 Genova The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign languages	English or French

For further information please contact	For further information Lauro Magnani, magnani@unige.it Laura Stagno, laura.stagno@unige.it
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