Disclaimer: Please note that only the Italian version of the present call for applications, issued with Rector's Decree 5479 dated 16.11.2023, is legally binding, the English version is provided for informational purposes only. The original Italian version is available at https://unige.it/usg/it/dottorati-di-ricerca

Course: BIOENGINEERING AND ROBOTICS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: BIOENGINEERING (CODE 10137)

<table>
<tr><td colspan="2">Course Coordinator: Massobrio Paolo</td></tr>
<tr><td colspan="2">Department of Informatics, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)</td></tr>
<tr><td colspan="2">Places: 8 (°) – Grants: 6 (*) [1]</td></tr>
<tr><td colspan="2">(*) 1 grant funded by Università degli Studi di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00
(*) 2 grants funded by The Italian Institute of Technology (IIT), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00
(*) 1 grant funded by Università degli Studi di Cagliari. Grant: EU project 101135183 MYRTUS "Multi-layer 360° dYnamic orchestrion and interopeRable design environmenT for compute-continUum Systems" CALL-topic: HORIZON-CL4-2023-DATA-01-04 - Cognitive Computing Continuum: Intelligence and automation for more efficient data processing (AI, data and robotics partnership) (RIA), CUP: F23C23000680006. The annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00
(*) 2 grant funded within PNRR MNESYS project (PE00000006) - A Multiscale integrated approach to the study of the nervous system in health and disease (DD. 1553 11.10.2022) CUP: D33C22001340002; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500 [1]
(°) 1 place reserved for employees of Fondazione Don Carlo Gnocchi
(°) 1 place reserved for employees of FISM</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Candidates must submit:
- the complete list of all the exams sat during their Bachelor’s and Master’s degree and/or equivalents (BS, Master) specifying the average of marks or equivalent indicator.
- the specific research themes candidates want to be evaluated on (see the list of research themes listed below and on the doctorate website: https://biorob.phd.unige.it/how-to-apply);
- a project proposal related to one (or more) of the research themes offered (please use the template available at the website: https://biorob.phd.unige.it/how-to-apply);
- a curriculum vitae et studiorum including all the technical scientific studies/activities already done and pertinent to the doctoral programme;
- endorsement letters (maximum 3) from university professors or recognized experts in the field supporting the candidate.
- the Candidate Summary Profile form available at https://biorob.phd.unige.it/how-to-apply.</td></tr>
<tr><td>Research Themes</td><td>- 3D in vitro model of Parkinson’s disease (UNIGE)
- A computational analysis of early vision function in silico networks of LIF neurons (UNIGE)
- Visual feedback perturbations and collaborative tasks with haptic feedback for innovative neurorehabilitation based on virtual reality (UNICA)
- 3D printed in vitro model of cortical brain-like tissue (MNESYS)
- A patient-driven precision medicine approach to investigate pathogenesis of autoimmune encephalitis (MNESYS) [1]
- Development of a computational pipeline to design RNA aptamers (IIT)
- Development of novel user experience metrics to evaluate lower and upper limbs exoskeletons for rehabilitation (IIT)
- Activity of Daily Living in Multiple Sclerosis: A Technological Assessment (FISM)
- Robotic rehabilitation in severe acquired brain injuries: a tailored multidimensional approach (Fondazione don Gnocchi)

The detailed description of the research themes can be found at the following link:
https://biorob.phd.unige.it/how-to-apply</td></tr>
<tr><td>Information on references</td><td>Candidates must choose not less than one and not more than three referees to endorse their candidature. The referees must be university professors or recognized experts in the field, and must send the reference letters (specifying their name, role and affiliation), within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: phd.biorob@dibris.unige.it.</td></tr>
<tr><td>Foreign Languages</td><td>English</td></tr>
</table>

Further Information	- The detailed description of the research themes can be found at the following links: https://biorob.phd.unige.it/how-to-apply - The template for the research project can be found at the following link: https://biorob.phd.unige.it/how-to-apply - The candidate summary profile form can be found at the following link: https://biorob.phd.unige.it/how-to-apply For further information about the research themes please contact: Prof. Paolo Massobrio paolo.massobrio@unige.it

[1] 1 position with grant added following the decree of the Director of DIBRIS dated 30.11.2023

Course: BIOENGINEERING AND ROBOTICS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: BIOENGINEERING (CODE 10138)

<table>
<tr><td colspan="2">Course Coordinator: Massobrio Paolo</td></tr>
<tr><td colspan="2">Department of Informatics, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)</td></tr>
<tr><td colspan="2">Places: 1 – Grants: 1 (*)</td></tr>
<tr><td colspan="2">(*) 1 grants funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f) in collaboration and with the contribution of REACT4LIFE S.r.l.; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243.
Research project: Development of semi-automated "Organ-on-Chip" platforms using pumping systems and robotics (REACT4LIFE S.r.l.)</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND EXAM

• Assessment of qualifications/publications and the curriculum vitae et studiorum
• Written test (research project)
• Interview that includes the description of the candidate’s research area of interest, also on the basis of previous activities stated in his/her scientific professional curriculum</td></tr>
<tr><td>Interview</td><td>Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Candidates must submit:
- the complete list of all the exams sat during their Bachelor’s and Master’s degree and/or equivalents (BS, Master) specifying the average of marks or equivalent indicator.
- the specific research themes candidates want to be evaluated on (see the list of research themes listed below and on the doctorate website: https://biorob.phd.unige.it/how-to-apply);
- a project proposal related to one (or more) of the research themes offered (please use the template available at the website: https://biorob.phd.unige.it/how-to-apply);
- a curriculum vitae et studiorum including all the technical scientific studies/activities already done and pertinent to the doctoral programme;
- endorsement letters (maximum 3) from university professors or recognized experts in the field supporting the candidate.
- the Candidate Summary Profile form available at https://biorob.phd.unige.it/how-to-apply.</td></tr>
<tr><td>Research Themes</td><td>Research project for grant within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f):

- Development of semi-automated "Organ-on-Chip" platforms using pumping systems and robotics (REACT4LIFE srl)</td></tr>
<tr><td>Information on references</td><td>Candidates must choose not less than one and not more than three referees to endorse their candidature. The referees must be university professors or recognized experts in the field, and must send the reference letters (specifying their name, role and affiliation), within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: phd.biorob@dibris.unige.it.</td></tr>
<tr><td>Foreign Languages</td><td>English</td></tr>
<tr><td>Further Information</td><td>Further information about commitments and conditions of the grants funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f) are available in the Notice of competition (article 6, paragraph 6)

Months to be spent abroad: 0</td></tr>
</table>

Course: BIOENGINEERING AND ROBOTICS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: ROBOTICS AND AUTONOMOUS SYSTEMS (CODE 10139)

Course Coordinator: Massobrio Paolo	
Department of Informatics, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant funded by Università degli Studi di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS
Further information on how to present qualifications/publications	Candidates must submit: - the complete list of all the exams sat during their Bachelor's and Master's degree and/or equivalents (BS, Master) specifying the average of marks or equivalent indicator. - the specific research themes candidates want to be evaluated on (see the list of research themes listed below and on the doctorate website: https://biorob.phd.unige.it/how-to-apply); - a project proposal related to one (or more) of the research themes offered (please use the template available at the website: https://biorob.phd.unige.it/how-to-apply); - a curriculum vitae et studiorum including all the technical scientific studies/activities already done and pertinent to the doctoral programme; - endorsement letters (maximum 3) from university professors or recognized experts in the field supporting the candidate. - the Candidate Summary Profile form available at https://biorob.phd.unige.it/how-to-apply.
Research Themes	The following research themes are proposed: - Coordination and control of autonomous robots The detailed description of the research themes can be found at the following link: https://biorob.phd.unige.it/how-to-apply
Information on references	Candidates must choose not less than one and not more than three referees to endorse their candidature. The referees must be university professors or recognized experts in the field, and must send the reference letters (specifying their name, role and affiliation), within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address: phd.biorob@dibris.unige.it.
Foreign Languages	English
Further Information	- The detailed description of the research themes can be found at the following links: https://biorob.phd.unige.it/how-to-apply - The template for the research project can be found at the following link: https://biorob.phd.unige.it/how-to-apply - The candidate summary profile form can be found at the following link: https://biorob.phd.unige.it/how-to-apply For further information about the research themes please contact: Prof. Giorgio Cannata giorgio.cannata@unige.it

Course: BIOTECHNOLOGIES IN TRANSLATIONAL MEDICINE

Curriculum: REGENERATIVE MEDICINE AND TISSUE ENGINEERING (CODE 10140)

Course Coordinator: Malatesta Paolo	
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES)	
Places: 1 – **Grants:** 1 (*)	
(*) 1 grant funded by Università degli Studi di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00.	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	All candidates are asked to submit a research project proposal (max 2 A4 sheets, font size 12) together with the qualifications. The project will be evaluated by the commission together with the qualifications and discussed during the oral interview.
Exam Syllabus	Interview on the titles and on the research project presented.
Research Themes	Tissue Engineering; Development/utilization of biocompatible, biodegradable materials capable of integrating and releasing molecules and cells).
Information on references	No letters of reference are required. Any reference letters received in any case will not be taken into consideration for scoring purposes.
Foreign Languages	English
Further Information	Coordinator: Prof. Paolo Malatesta - Department of Experimental Medicine - Tel. 0105558403 - paolo.malatesta@unige.it Contact person (to whom to request scientific information): Prof. Sara Tavella - Department of Experimental Medicine - Tel. 0105558241 – sara.tavella@unige.it Organizing Secretariat (to request technical information): Mr. Enrico Zeraschi - Department of Experimental Medicine - Tel. 0105558266 - enrico.zeraschi@unige.it

Course: CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING

Curriculum: CHEMICAL, MATERIALS AND PROCESS ENGINEERING (CODE 10141)

Course Coordinator: Massabò Roberta	
Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria Civile, Chimica e Ambientale – DICCA)	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant funded by ENEA, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	The application (curriculum vitae) must contain Transcripts of Records, stating the courses attended and marks obtained throughout the candidate's university career (Bachelor and M.Sc. degrees; Laurea Triennale and Magistrale degrees). The transcripts of Records must be official documents released by the universities which awarded the degrees. Undergraduate candidates at the deadline of the public notice may submit further documentation, which they deem appropriate, in order to document their university career. The knowledge of foreign languages certified by an international certificate (TOEFL, CPE, CAE, FCE, etc.) attached to the cv would be an asset.
Exam Syllabus	The interview will be a detailed scientific discussion on the candidate's research project, Curriculum Vitae et Studiorum and qualifications/publications. The interview is also aimed at verifying that the candidate has adequate knowledge to deal with studies in the chosen curriculum.
Research Themes	The research themes are those of the curriculum in "Chemical, Materials and Process Engineering"; they are described in details on the course web page: http://dottorato.dicca.unige.it/eng/chmatpr/. The research project (10 pages max) must be prepared on one of the Project Thematics listed in http://dottorato.dicca.unige.it/documents/PhD_projects2023_ICMP.pdf or in http://dottorato.dicca.unige.it/documents/PhD_industrial_projects2023_ICMP.pdf for projects with industry, under the general Thematic "Chemical, Materials and Process Engineering". The project must be prepared under the guidance of the referent of the Project in the list above. The project must include the title of the Project (from the list above), the candidate's research interests and motivations, a short abstract, the State of the Art and relevant references, and the objectives of the research activity. Projects that are not submitted as requested might be penalized in the evaluation process.
Information on references	Candidates must choose at least one and no more than three referees to support their candidature. One of the referees must be the member of the curriculum committee (http://dottorato.dicca.unige.it/eng/info/staff/comitatochmatpr.html) with whom the research project has been agreed. The referees must be university professors or experts in the subject. The reference letter must be sent by the referee, within the deadline of the public notice and using their institutional e-mail address, to the doctoral secretariat at dottorato.dicca@unige.it. If the referee is not a university professor, he/she must also send the Curriculum Vitae and a list of publications. The name, status and current position of the referees chosen by the candidate must be stated in the application. Reference letters that are not presented as requested will not be taken into consideration.
Foreign Languages	English
Further Information	http://dottorato.dicca.unige.it/eng/ Prof. Attilio Converti converti@unige.it

Course: CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING

Curriculum: FLUID DYNAMICS AND ENVIRONMENTAL ENGINEERING (CODE 10142)

Course Coordinator: Massabò Roberta	
Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria Civile, Chimica e Ambientale – DICCA)	
Places: 2 (°) – **Grants**: 0	
(°) 1 place reserved for employees of Istituto Idrografico della Marina (°) 1 place reserved for employees of Marina Militare	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	The application (curriculum vitae) must contain Transcripts of Records, stating the courses attended and marks obtained throughout the candidate's university career (Bachelor and M.Sc. degrees; Laurea Triennale and Magistrale degrees). The transcripts of Records must be official documents released by the universities which awarded the degrees. Undergraduate candidates at the deadline of the public notice may submit further documentation, which they deem appropriate, in order to document their university career. The knowledge of foreign languages certified by an international certificate (TOEFL, CPE, CAE, FCE, etc.) attached to the cv would be an asset.
Exam Syllabus	The interview will be a detailed scientific discussion on the candidate's research project, Curriculum Vitae et Studiorum and qualifications/publications. The interview is also aimed at verifying that the candidate has adequate knowledge to deal with studies in the chosen curriculum.
Research Themes	The research themes are those of the curriculum in "Fluid Dynamics and Environmental Engineering"; they are described in details on the course web page: http://dottorato.dicca.unige.it/eng/fluamb/. The research project (10 pages max) must be prepared on one of the Project Thematics listed in: http://dottorato.dicca.unige.it/documents/PhD_projects2023_FIA.pdf, or in http://dottorato.dicca.unige.it/documents/PhD_industrial_projects2023_FIA.pdf for projects with industry, under the general Thematic "Fluid Dynamics and Environmental Engineering". The project must be prepared under the guidance of the referent of the Project in the list above. The project must include the title of the Project (from the list above), the candidate's research interests and motivations, a short abstract, the State of the Art and relevant references and the objectives of the research activity. Projects that are not submitted as requested might be penalized in the evaluation process.
Information on references	Candidates must choose at least one and no more than three referees to support their candidature. One of the referees must be the member of the curriculum committee (http://dottorato.dicca.unige.it/eng/info/staff/comitatofluamb.html) with whom the research project has been agreed. The referees must be university professors or experts in the subject. The reference letter must be sent by the referee, within the deadline of the public notice and using their institutional e-mail address, to the doctoral secretariat at dottorato.dicca@unige.it. If the referee is not a university professor, he/she must also send the Curriculum Vitae and a list of publications. The name, status and current position of the referees chosen by the candidate must be stated in the application. Reference letters that are not presented as requested will not be taken into consideration.
Foreign Languages	English
Further Information	http://dottorato.dicca.unige.it/eng/ Prof. Rodolfo Repetto rodolfo.repetto@unige.it

Course: CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING

Curriculum: FLUID DYNAMICS AND ENVIRONMENTAL ENGINEERING (CODE 10143)

Course Coordinator: Massabò Roberta	
Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria Civile, Chimica e Ambientale – DICCA)	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant funded within **PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f)** in collaboration and with the contribution of WEATHER WATER AND SAND; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243. Research project: Hindcasting and forecasting the triggering and dynamics of marine sediment gravity flows	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND EXAM • Assessment of qualifications/publications and the curriculum vitae et studiorum • Written test (research project) • Interview that includes the description of the candidate's research area of interest, also on the basis of previous activities stated in his/her scientific professional curriculum
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	The application (curriculum vitae) must contain Transcripts of Records, stating the courses attended and marks obtained throughout the candidate's university career (Bachelor and M.Sc. Degrees; Laurea Triennale and Magistrale degrees). The transcripts of Records must be official documents released by the universities which awarded the degrees. Undergraduate candidates at the deadline of the public notice may submit further documentation, which they deem appropriate, in order to document their university career. The knowledge of foreign languages certified by an international certificate (TOEFL, CPE, CAE, FCE, etc.) attached to the cv would be an asset.
Exam Syllabus	The interview will be a detailed scientific discussion on the candidate's research project, Curriculum Vitae et Studiorum and qualifications/publications. The interview is also aimed at verifying that the candidate has adequate knowledge to deal with studies in the chosen curriculum.
Research Themes	Research project for grant within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f): "Hindcasting and forecasting the triggering and dynamics of marine sediment gravity flows" The research project (10 pages max) must be prepared on the related project thematic described in: http://dottorato.dicca.unige.it/documents/PhD_industrial_projects2023_FIA.pdf The project must be prepared under the guidance of the referent of the Project. The project must include the title of the Project, the candidate's research interests and motivations, a short abstract, the State of the Art and relevant references and the objectives of the research activity. Projects that are not submitted as requested might be penalized in the evaluation process.
Information on references	Candidates must choose at least one and no more than three referees to support their candidature. One of the referees must be the member of the curriculum committee (http://dottorato.dicca.unige.it/eng/info/staff/comitatofluamb.html) with whom the research project has been agreed. The referees must be university professors or experts in the subject. The reference letter must be sent by the referee, within the deadline of the public notice and using their institutional e-mail address, to the doctoral secretariat at dottorato.dicca@unige.it. If the referee is not a university professor, he/she must also send the Curriculum Vitae and a list of publications. The name, status and current position of the referees chosen by the candidate must be stated in the application. Reference letters that are not presented as requested will not be taken into consideration.
Foreign Languages	English
Further Information	Further information about commitments and conditions of the grants funded within **PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f)** are available in the Notice of competition (article 6, paragraph 6) Months to be spent abroad: 0 http://dottorato.dicca.unige.it/eng/ Prof. Rodolfo Repetto rodolfo.repetto@unige.it

Course: CIVIL, CHEMICAL AND ENVIRONMENTAL ENGINEERING

Curriculum: STRUCTURAL AND GEOTECHNICAL ENGINEERING, MECHANICS AND MATERIALS (CODE 10144)

Course Coordinator: Massabò Roberta	
Department of Civil, Chemical and Environmental Engineering (Dipartimento di Ingegneria Civile, Chimica e Ambientale – DICCA)	
Places: 2 (°) – **Grants**: 1 (*) [1]	
(*) 1 grant funded within PNRR CN MOST "Sustainable Mobility"; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500 (CUP D33C22001290002) (°) 1 place reserved to employees of SETECO INGEGNERIA s.r.l. [1]	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	The application (curriculum vitae) must contain Transcripts of Records, stating the courses attended and marks obtained throughout the candidate's university career (Bachelor and M.Sc. Degrees; Laurea Triennale and Magistrale degrees). The transcripts of Records must be official documents released by the universities which awarded the degrees. Undergraduate candidates at the deadline of the public notice may submit further documentation, which they deem appropriate, in order to document their university career. The knowledge of foreign languages certified by an international certificate (TOEFL, CPE, CAE, FCE, etc.) attached to the cv would be an asset.
Exam Syllabus	The interview will be a detailed scientific discussion on the candidate's research project, Curriculum Vitae et Studiorum and qualifications/publications. The interview is also aimed at verifying that the candidate has adequate knowledge to deal with studies in the chosen curriculum.
Research Themes	The research themes are those of the curriculum in "Structural and Geotechnical Engineering, Mechanics and Materials"; they are described in details on the course web page: http://dottorato.dicca.unige.it/eng/stmatgeo/. The research project (10 pages max) must be prepared on one of the Project Thematics listed in http://dottorato.dicca.unige.it/documents/PhD_projects2023_SMG.pdf or in http://dottorato.dicca.unige.it/documents/PhD_industrial_projects2023_SMG.pdf for projects with industry, under the general Thematic "Structural and Geotechnical Engineering, Mechanics and Materials". The project must be prepared under the guidance of the referent of the Project in the list above. The project must include the title of the Project (from the list above), the candidate's research interests and motivations, a short abstract, the State of the Art and relevant references and the objectives of the research activity. Projects that are not submitted as requested might be penalized in the evaluation process. *Fatigue of steel bridges* (research theme for place reserved to employees of SETECO INGEGNERIA Srl) [1]
Information on references	Candidates must choose at least one and no more than three referees to support their candidature. One of the referees must be the member of the curriculum committee (http://dottorato.dicca.unige.it/eng/info/staff/comitatostmatgeo.html) with whom the research project has been agreed. The referees must be university professors or experts in the subject. The reference letter must be sent by the referee, within the deadline of the public notice, to the doctoral secretariat at dottorato.dicca@unige.it. If the referee is not a university professor, he/she must also send the Curriculum Vitae and a list of publications. The name, status and current position of the referees chosen by the candidate must be stated in the application. Reference letters that are not presented as requested will not be taken into consideration.
Foreign Languages	English
Further Information	http://dottorato.dicca.unige.it/eng/ Prof. Maria Pia Repetto repetto@dicca.unige.it

[1] 1 place reserved to employees of SETECO INGEGNERIA s.r.l. added following letter of intent dated 13.12.2023

Course: LAW

Curriculum: PHILOSOPHY OF LAW AND HISTORY OF LEGAL CULTURE **(CODE 10145)**

Course Coordinator: Chiassoni Pierluigi	
Law Department (Dipartimento di Giurisprudenza – DDG)	
Positions: 1 – **Grant:** 1 (*)	
(*) 1 grant funded by the European Project "HABITAT", Title EN "How European Big Cities and Legal Systems Trigger Urban Inequality: An Inquiry into Law and Economics", Program "Horizon Europe", Action ERC StG, G.A. no. 101076616, CUP: D33C22002160006	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS
Further information on how to present qualifications/publications	From the CV and other documents enclosed the following data should result: a) University degree and the final note or qualification. b) Any other post-lauream degree (e.g., master's degrees/LLM); c) Publications concerning one or more of the research topics of the present Curriculum, if any; d) Research experiences and research and educational activities, if any. Candidates must submit a research project (Maximum 5 pages, possibly Times New Roman 12, including the bibliographical references) on a research topic specified in the following box. The project must contain clear statement of the topic, goals, and stages of the research activity, along with essential bibliographical references. The research project must be written in English
Research Themes	These positions are funded by the European Project "HABITAT", Title EN "How European Big Cities and Legal Systems Trigger Urban Inequality: An Inquiry into Law and Economics", Program "Horizon Europe", Action ERC StG, G.A. no. 101076616, CUP: D33C22002160006. The proposals must relate to the main research objectives of the HABITAT project. Thus, the proposals of the applicant must be devoted to the analysis of the main regulatory interventions in urban development, urban planning, property law, access to mortgages, financing and bonuses, real estate acquisition, credit score assessment, city network institutions, elements of urban governance, public law contracts, and procurement. The Italian system, the French system, the German system, and the English system will be the object of comparative study, with particular attention to the following cities: Milan, Paris, Berlin, and London. The method of analysis uses elements of law and economics and applied economics. The spectrum of the investigation covers the period 1980-2020: both legislative and jurisprudential changes will be studied, considering sociocultural and contextual background variables.
Foreign Languages	English
Further Information	During the three years of the Program (and preferably during the second year) PhD candidates shall spend at least a six-months period of research abroad, or at qualified international Academic and Research Centers, conducting research on the topic of their PhD dissertation. Referente del curriculum / Curriculum Coordinator: Prof. Pierluigi Chiassoni pierluigi.chiassoni@unige.it PI of the ERC STG Project: Dr. Alessio Sardo alessio.sardo@unige.it Referente amministrativo / Curriculum Officer: Mrs. Stefania Lavezzo dottorato.diritto@unige.it

Course: ECONOMICS AND QUANTITATIVE METHODS
(CODE 10146)

<table>
<tr><td colspan="2">Course Coordinator: Piga Claudio Antonio Giuseppe</td></tr>
<tr><td colspan="2">Department of Economics (Dipartimento di Economia – DIEC)</td></tr>
<tr><td colspan="2">Places: 2 – Grants: 2 (*)</td></tr>
<tr><td colspan="2">(*) 1 grant funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f) in collaboration and with the contribution of FinPro Liguria Sr,l; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243.
Research project: Development of an economic model of an economic area based on the SIBATER methodology

(*) 1 grant funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f) in collaboration and with the contribution of FinPro Liguria Srl; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243.
Research project: Development of economic ecosystems for goods and services, towards a collaborative and circular economy.</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND EXAM

• Assessment of qualifications/publications and the curriculum vitae et studiorum
• Written test (research project)
• Interview (in English) that includes the description of the candidate’s research area of interest, also on the basis of previous activities stated in his/her scientific professional curriculum</td></tr>
<tr><td>Interview</td><td>Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca.
The shortlist of candidates selected for the interview will be published on the Doctorate’s website https://eqm.phd.unige.it</td></tr>
<tr><td>Research Themes</td><td>Research project for grant within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f): Development of an economic model of an economic area based on the SIBATER methodology

The general goal of this project is the definition of an innovative approach to local sustainable development that, through the transfer of knowledge among different players, is aimed at implementing the European strategies on climate change, food, soil, and biodiversity so as to enhance the processes of territorial development. The creation of Key Performance Indicators and their statistical properties will be one of the central aspect of the research.

Research project for grant within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f): Development of economic ecosystems for goods and services, towards a collaborative and circular economy

Main goal is to define a socio-economic model to identify the needs (at firm and territorial level) for the ecological transition (food safety and sustainable agriculture, digital innovation). The final objective is the definition of market-based policies aimed at supporting the objective of the ecological transition. From the supply side it is necessary to identify incentive-compatible methods for technological transfer; from the consumer side it may be necessary to enhance the consumers’ ability to identify suitable products and sustainable lifestyles. The creation of Key Performance Indicators and their statistical properties will be one of the central aspect of the research.</td></tr>
<tr><td>Information on references</td><td>Send one reference letters in support of application to the following e-mail address: dottoratodiec@economia.unige.it</td></tr>
<tr><td>Foreign Languages</td><td>English</td></tr>
</table>

Further Information	The winners will have to spend an internship research and study period of 12 months at the FinPro srl headquarters. This period can be non-continuous over the three years of the scholarship. Further information about commitments and conditions of the grants funded within **PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f)** are available in the Notice of competition (article 6, paragraph 6) Months to be spent abroad: 0

Course: HAEMATO-ONCOLOGY AND CLINICAL-TRANSLATIONAL INTERNAL MEDICINE

Curriculum: TRANSLATIONAL HAEMATOLOGY (CODE 10147)

Course Coordinator: Nencioni Alessio	
Department of Internal Medicine and Medical Specialities (Dipartimento di Medicina interna e Specialità mediche – DIMI)	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant funded by Università degli Studi di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Exam Syllabus	During the on-line interview, the candidate will be evaluated with respect to the following criteria: -Knowledge of the topics to be covered (see Research Themes) -Motivation -Logical thinking -Overall vision -Aptitude to carry out an independent project -Potential for excellence and leadership qualities -Capacity to work in team Knowledge of the English language will be evaluated by a short reading and translation test.
Research Themes	- Overview of main biological features observed in blood cancers: leukemia, lymphomas and multiple myeloma - Novel therapeutic approaches for the treatment of hematologic malignancies by use of precision-medicine strategies - The role of up-to date technologies single-cell-based for tumor heterogeneity investigations - Bioinformatics approaches to investigate hematologic malignancies - Role of plasma and platelet derivatives in tissue regeneration and their applications in onco-hematology
Information on references	Applicants are required to indicate 1 to 3 supporters to their application. Those supporters will have to be University Professors or recognized experts in the field. Supporters will take care of sending their approval letters, within the term, to the Responsible of the PhD Course Prof. Alessio Nencioni, Dip. Di Medicina Interna DIMI, viale Benedetto XV n.6, (16132 Genova) e-mail: alessio.nencioni@unige.it, ricercadimi@unige.it, to Prof. Roberto Lemoli e-mail: roberto.lemoli@unige.it Within the application form, applicants will have to specify in detail name, surname and affiliation of the reference tutors.
Foreign Languages	English
Further Information	Reference professors: Roberto Lemoli e-mail: roberto.lemoli@unige.it Michele Cea e-mail: michele.cea@unige.it Maddalena Mastrogiacomo e-mail: Maddalena.Mastrogiacomo@unige.it

Course: PHYSICS AND NANOSCIENCES
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT) and National Institute for Nuclear Physics (Istituto Nazionale di Fisica Nucleare – INFN)

Curriculum: PHYSICS (CODE 10148)

<table>
<tr><td colspan="2">Course Coordinator: Ferrando Riccardo</td></tr>
<tr><td colspan="2">Department of Physics (Dipartimento di Fisica – DIFI)</td></tr>
<tr><td colspan="2">Places: 4 – Grants: 4 (*)</td></tr>
<tr><td colspan="2">(*) 4 grants funded by IIT, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</td></tr>
<tr><td>Interview</td><td>Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Each candidate must submit a description of the research project he/she intends to carry out during the three years of the PhD course.The project must be written in English. A maximum length of 6000 characters including spaces is allowed.</td></tr>
<tr><td>Exam Syllabus</td><td>- Discussion about the qualification of the candidate.
- Discussion of the Master's thesis.
- Presentation and discussion of the proposed research project.
- Interview on basic physics topics (general physics, modern physics).
- Verification of knowledge of the English language.</td></tr>
<tr><td>Research Themes</td><td>Research topics of the scholarships funded by IIT:

• 2 fellowships on the theme “Study and realization of 3-dimensional transistors based on 1D and 2D materials”
The proposed activity concerns the modelling of nano-devices based on CNT-FETs and potential 2D materials-FETs; the study of the device performances; the realization of 1D and 2D materials-FETs systems by means of biofabrication and nanofabrication; the basic experimental tests of these devices. The project has broad implications in the world of physics, biotechnology and nanoelectronics. In particular, they could lead to revolutionary applications in fields such as nanofabrication, computing, nanodevices. This project will require the use of the following methods and techniques: Modelling; Nanofabrication and Nanocharacterization
Contacts: Remo Proietti Remo.Proietti@iit.it and Denis Garoli Denis.Garoli@iit.it

• 1 fellowship on the theme “Novel tools for human brain investigations: from hybrid brain interfaces to RNA/protein dynamics”.
The project aims to develop a wide class of multi-functional sensors across the fields of nano-photonics, nano-electronics, and biophysics. By interfacing these nanostructured sensors with living human neurons we want to make an effective Hybrid Brain-Sensors interface. In addition, advanced optical and electrical nano-sensing at single molecule level will be developed so to provide novel tools in RNA/Protein investigations of brain functions.
Contact: Francesco De Angelis - francesco.deangelis@iit.it and Giovanna D’Aste - giovanna.daste@iit.it

• 1 fellowship on the theme “Control and modification of the exciton properties of semiconductor nanocrystals by light-matter hybridization”.
The candidate will work on the design and optimization of new nanophotonic devices based on the integration between semiconductor nanocrystals and plasmonic metasurfaces. The activity will also concern the investigation of the photophysical processes that regulate the dynamics of the system under strong light-matter coupling.
Contact: Andrea Toma - andrea.toma@iit.it</td></tr>
<tr><td>Information on references</td><td>Candidates must choose up to three referees to support their application. These contacts must be university professors or experts in the field. It is preferable that at least one contact belongs to the University of Genoa or to the affiliated research bodies (CNR/INFN/IIT). The referents will be responsible for sending the reference letters, preferably written in English, within the deadline of the call.The letters must be addressed to the attention of the course coordinator Prof. Riccardo Ferrando to the e-mail address: phd@fisica.unige.it.</td></tr>
</table>

	The subject of the e-mail must be: PHD REFERENCE LETTER – PHYSICS.
Foreign Languages	Excellent knowledge of both spoken and written English. A very basic knowledge of Italian is desirable.

Course: COMPUTER SCIENCE AND SYSTEMS ENGINEERING

Curriculum: COMPUTER SCIENCE (CODICE 10149)

Course Coordinator: Delzanno Giorgio	
Department of Informatics, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)	
Places: 1 - **Grants:** 1 (*)	
(*) 1 grant funded by Department (DIFI) within the project "Multi-modal learning for gait-based human analysis and authentication" Award Number: FA8655-23-1-7074, funded by Air Force Office of Scientific Research (AFOSR). The annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00.	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications and publications	**Curriculum vitae:** candidates must present a curriculum vitae with clear indications on the qualifications acquired with relative grades, research experience, publications, awards and work experience. **Research project:** candidates must submit a research project with clear indication of the following information: research theme or macro-theme (see specific section of this notice); reference DIBRIS research group and company that cofinances the position. **Instructions and suggestions** for the submission of the research proposal are available at the URL https://csse.phd.unige.it/admission
Exam Syllabus	The comparative procedure consists of - an assessment of the candidate qualifications - an interview to verify background and knowledge of the candidate as well as motivations and goals of the research proposal submitted with the application.
Research Themes	The specific research is "Multi-modal learning for human motion analysis and authentication" within an Air Force Office of Scientific Research (AFOSR) research project, reference Prof. Nicoletta Noceti For more details (abstracts/contacts), refer to the URL: https://csse.phd.unige.it/admission
Information on references	Candidates must choose no less than one and no more than three contact persons to support their candidacy. These referents must be university professors or experts in the field. It will be the referents' responsibility to send the reference letters, within the deadline of the call, to the attention of the Coordinator of the PhD course at the e-mail address: phd.compsci@dibris.unige.it. In the application for admission, candidates must indicate the name, qualification and place of employment of the contact persons chosen by them. The reference letter template is available at the URL: https://csse.phd.unige.it/admission
Language	English

Course: COMPUTER SCIENCE AND SYSTEMS ENGINEERING

Curriculum: SYSTEMS ENGINEERING (CODICE 10150)

Course Coordinator: Giorgio Delzanno	
Department of Informatics, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)	
Places: 1 - **Grants**: 1 (*)	
(*) 1 grant funded by Università degli Studi di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications and publications	**Curriculum vitae:** candidates must present a curriculum vitae with clear indications on the qualifications acquired with relative grades, research experience, publications, awards and work experience. **Research project:** candidates must submit a research project with clear indication of the following information: research theme or macro-theme (see specific section of this notice); reference DIBRIS research group and company that cofinances the position. **Instructions and suggestions** for the submission of the research proposal are available at the URL https://csse.phd.unige.it/admission .
Exam Syllabus	The comparative procedure consists of - an assessment of the candidate qualifications - an interview to verify background and knowledge of the candidate as well as motivations and goals of the research proposal submitted with the application.
Research Themes	For more details (abstracts/contacts), refer to the URL: https://csse.phd.unige.it/admission
Information on references	Candidates must choose no less than one and no more than three contact persons to support their candidacy. The referents must be university professors or experts in the field. It will be the referents' responsibility to send the reference letters, within the deadline of the call, to the attention of the Coordinator of the PhD course at the e-mail address: phd.syseng@dibris.unige.it. In the application for admission, candidates must indicate the name, qualification and place of employment of the contact persons chosen by them. The reference letter template is available at the URL: https://csse.phd.unige.it/admission
Language	English
Other Information	Curriculum coordinator Prof.ssa Simona Sacone

Course: ENGINEERING OF MODELS, MACHINE AND SYSTEMS FOR ENERGY, ENVIRONMENT AND TRANSPORT

Curriculum: MATHEMATICAL ENGINEERING AND SIMULATION (CODE 10151)

<table>
<tr><td colspan="2">Course Coordinator: Daniele Simoni</td></tr>
<tr><td colspan="2">Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti – DIME)</td></tr>
<tr><td colspan="2">Places: 3 – Grants: 3 (*)</td></tr>
<tr><td colspan="2">(*) 2 grants funded by Università degli Studi di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00
(*) 1 grant funded by Department (DIME), on the topic Strategic Engineering and Modeling - Advances in Strategic Engineering based on the combined use of Data Analytics, Modeling & Simulation, Artificial Intelligence in closed loop with reality applied to Decision Making. The annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00 [1]</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS</td></tr>
<tr><td>Research Themes</td><td>The following research topics are proposed within the curriculum:
1. Continuous and discrete mathematical models for the thermo-fluid dynamics of energy systems; fluid mechanics and related equations. Problems of acoustics and wave propagation in fluid and solid media using "analogous instruments". Metamaterials. The Dirac field in interaction.
2. Methods of development and analysis of discrete and continuous models for the simulation of systems. Numerical analysis tools and problems; development of simulators and simulator federations for complex systems. Definition of objectives, formalization, implementation solutions, integration, verification, validation, testing, accreditation and execution of real-time, fast-time and slow time models.
3. Physical-mathematical models with finite or infinite degrees of freedom, interaction field theory. Extended theories of gravity. Geometric and analysis techniques. Diffusion problems and resolution techniques. Environmental problems of public safety for the fight against terrorism.
4. Mechanics of solids. Numerical and control techniques.
5. Development of aggregate and operational programming systems, realized through finite capacity tools, with discrete event simulation techniques. Optimal state estimation for linear and nonlinear systems.
6. Development and application of artificial intelligence techniques. Supporting geometric methodologies for the development of simulators in virtual reality environments. Simulation applied to the logistics and transport sector for supply chain management for decision support.
7. Simulation applied to the military, tactical and strategic sector.</td></tr>
<tr><td>Information on references</td><td>In the admission application, candidates must indicate the name, qualification and place of employment of the contact persons chosen by them.</td></tr>
<tr><td>Foreign Languages</td><td>English</td></tr>
<tr><td>Further Information</td><td>For further information, please contact Prof. Patrizia Bagnerini: patrizia.bagnerini@unige.it</td></tr>
</table>

[1] Information updated following the note of the course coordinator dated 21.11.2023

Course: MECHANICAL, ENERGY AND MANAGEMENT ENGINEERING

Curriculum: MECHANICS, MEASUREMENTS AND MATERIALS (CODE 10152)

Course Coordinator: Berselli Giovanni	
Department of Mechanical, Energetics, Management and Transport Engineering (Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti – DIME)	
Places: 3 – **Grants**: 3 (*)	
(*) 2 grants funded by Università degli Studi di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00 (*) 1 grant cofunded by MUR/DIME, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	The qualifications/publications must contain a detailed explanation and the development plan of how to present a possible research project, quoting the Robotics and Mechatronics (RM) syllabus, and the field qualifications/pubblications it refers to, in order to evaluate the candidate's ability to organize and carry out research. If admitted to the doctoral course, the candidate will generally carry out his/her activity within the syllabus chosen for his/her project, but not necessarily on the specific activities described and planned in the actual project.
Exam Syllabus	The interview will focus on the discussion of the project, the qualifications presented by the candidate and on all the specific themes bound to the Mechanics, Measurements And Materials curriculum (MMM).
Research Themes	The Mechanics, Measurements and Materials (MMM) syllabus focuses on research themestypical of the Macrosectors it refers to. In particular the research themes suggested concern the functional and constructive design sector, CAD, CAE, PLM, PDM, additive manufacturing (polymer-based metals and composites (machine and material methods in combination), the mechanic behaviour of materials, materials and implants for medical, industrial and marin applications, calculus modelling and applications of composite components also for orthotics and biomedical applications, environmental compatibility and recycling, mechanical and mechatronic systems, motor vehicles, railway vehicles, airplanes, mechanical automation, working, raising and transport systems, lubrification, vibrations and noise, sound quality, experimental methods, diagnostics and qualifying of machines and components, monitoring and maintenance, reliability, reverse logistics. Mechatronics Design and Control of Energy Efficient Leg (research theme grant funded within D.M. 117 cofunded by Leonardo Spa) Development robotic devices fo upper limb rehabilitation (research themes for places reserved to employees of Rewing Srl
Information on references	Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator Prof. Giovanni Berselli, at giovanni.berselli@unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign Languages	English
Further Information	Coordinator of the PhD IMEG course and contact person for the MMM curriculum: Prof. Giovanni Berselli DIME/MEC via all'Opera Pia 15/A 16145 Genova (+39) 0103352839 giovanni.berselli@unige.it

Course: MATHEMATICS AND APPLICATIONS

Curriculum: MATHEMATICAL METHODS FOR DATA ANALYSIS (CODE 10153)

<table>
<tr><td colspan="2">Course Coordinator: Vigni Stefano</td></tr>
<tr><td colspan="2">Department of Mathematics (Dipartimento di Matematica – DIMA)</td></tr>
<tr><td colspan="2">Places: 2 Grants: 2 (*)</td></tr>
<tr><td colspan="2">(*) 1 grant funded by CNR-IMATI; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00
(*) 1 grant funded by Department (DIMA) within the ERC project “Efficient algorithms for sustainable machine learning”; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</td></tr>
<tr><td>Interview:</td><td>Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Besides the documentation listed in art. 3 of the public notice, candidates must present: - if available, their 5-year degree thesis (to be uploaded online).
Furthermore:- their three-year degree and five-year degree marks should be indicated in their curriculum;
- a research project (2 pages max.) which describes the research theme they intend to work on during the Doctoral Course.</td></tr>
<tr><td>Exam syllabus</td><td>The comparative assessment procedure consists in the assessment of qualifications/publications and in interview on the research project presented by the candidate.</td></tr>
<tr><td>Research themes</td><td>Research theme (CNR-IMATI project) - Methods and models for the semantic and multi-scale representation of complex urban environments.
Abstract - The research program aims to develop the formal and computational aspects necessary to define the operations that in cartography support the process known as cartographic generalization: these operations are thought to be applied to point clouds and geometric models that represent the urban physical reality acquired by remote sensing. The thesis is highly innovative and the program requires: (1) the study of methods for the geometric representation of shapes (surfaces, volumes, linear elements) through different representation schemes (polyhedral tessellations, surfaces or continuous curves) aimed at defining a new representation scheme capable of managing dimensionally heterogeneous elements; (2) definition and development of operators capable of automatically converting the representation of the urban context elements into different scale levels, where by scale we mean both as a descriptive/semantic scale (what is the meaning/nature of the real elements represented) and geometric (how detailed the digital representation must be). The program will be carried out in collaboration with several research projects, first of all, the CNR-DIITET Urban Intelligence Strategic Project, in which CNR-IMATI participates with a scientific leadership role regarding the mathematical modelling of 3D urban environments.

Research theme (ERC project) - Efficient Machine Learning for operators.
Abstract - While traditional machine learning primarily focuses on estimating scalar-valued functions from data, there is a growing interest in developing methods to learn more complex quantities, such as operators between Hilbert and Banach spaces. These operators play a central role when data are generated according to governing equations, particularly in the context of partial differential equations. In this project, our goal is to develop techniques that are efficient in terms of both data and computations, while also being supported by rigorous theoretical guarantees.</td></tr>
<tr><td>Information on references</td><td>Candidates must choose not less than one and not more than three referees to support their candidature. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following address:

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

or, alternatively, to the e-mail address: vigni@dima.unige.it

The name, status and service place of the referees chosen by the candidates must be stated in their applications.</td></tr>
</table>

Foreign languages	English
Further information	Prof. Stefano Vigni Dipartimento di Matematica, Università di Genova via Dodecaneso 35 16146 Genova GE E-mail: stefano.vigni@unige.it

Course: EXPERIMENTAL MEDICINE

Curriculum: INTERNATIONAL CURRICULUM IN PHARMACOLOGY AND TOXICOLOGY (CODE 10154)
Curriculum in agreement with Maastricht University, Maastricht, The Netherlands

Course Coordinator: Fedele Ernesto	
Department of Experimental Medicine (Dipartimento di Medicina Sperimentale – DIMES)	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant funded by Università degli Studi di Genova, the annual amount of the grant, gross of social security expenses to be paid by the recipient, is € 16.500,00	
At the end of the course a joint qualification will be awarded with Maastricht University, Maastricht, The Netherlands.	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Exam Syllabus	The interview (in English) will focus on the candidate's previous experiences in the field of scientific research or during the preparation of the final dissertation; there will be also a critical discussion on the research project presented by the candidate.
Research Themes	• Behavioral studies on mouse models of neurodegenerative diseases (1 grant funded by Università degli Studi di Genova).
Information on references	Candidates must choose not less than one and not more than three reference persons to support their candidacy. These reference persons must be University professors or experts in the subject. It is responsibility of the reference persons to send the reference letters, within the deadline of the call, to the Head of the curriculum of the doctoral course at the following address: Prof. Ernesto Fedele ernesto.fedele@unige.it The personal details (name/surname, qualification, institution) of the reference persons must be reported by the candidate in the application form.
Foreign Languages	English
Further Information	Prof. Ernesto Fedele University of Genoa DIFAR - Pharmacology and Toxicology Section Viale Cembrano 4 16148 Genoa (+39) 0103532659 ernesto.fedele@unige.it www.dms.unige.it

Course: NEUROSCIENCE
In Agreement with Istituto Italiano di Tecnologia (IIT)

Curriculum: NEUROSCIENCE AND NEUROTECHNOLOGIES (CODE 10155)

Coordinator: Nobili Lino	
Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOGMI)	
Places: 4 – **Grants**: 4 (*)	
(*) 4 grants funded by IIT, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00	
Methods of comparative evaluation	QUALIFICATIONS/PUBLICATIONS
Further information on how to prepare the application	The following documents must be sent as described in the call text: a) title and brief description of the degree thesis; b) list of exams taken, with marks; c) postgraduate research activities (including abstracts at conferences and scientific publications); d) an original research project in English signed by the candidate, on Neuroscience topics related to the research topics of the call, of a maximum of 10 pages (Arial 11 character). The project must include: Background and Rationale, Experimental Plan, Expected Results, Timeline of the Project, References; e) names, qualification and places of employment of the referees, not less than 1 and not more than 3, who must send the reference letters on the candidate directly to the following mail address: rossana.ciancio@iit.it f) declaration of knowledge of English as used in the PhD school.
Research themes	Development of new treatments of genetic diseases (Tutor Valter Tucci) Neuromodulation of cortical and subcortical circuits (Tutor Raffaella Tonini) Machine Learning in the phenotypic typing of preclinical models (Tutor Valter Tucci) Role of proprioception in motor control of the octopus (Tutor Letizia Zullo)
Information about references	Candidates must choose not less than one and not more than three Referees to support their application. These contacts must be university professors or experts in the field. The Referees must be responsible for sending the reference letters as pdf files, within the deadline of the call, to the contact person of the Curriculum in Neuroscience and Brain Technologies, Prof. Fabio Benfenati, to the following mail address: rossana.ciancio@iit.it In the application, candidates have to list the name, position and affiliation of the chosen Referees.
Foreign language	English
Further information	For further information, please write to: rossana.ciancio@iit.it

Course: NEUROSCIENCES
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: MOTORY AND SPORTS ACTIVITIES SCIENCES (CODE 10156)

Course Coordinator: Nobili Lino	
Department of Neurosciences, Rehabilitation, Ophthalmology, Genetics and Mother and Child Sciences (Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili – DINOGMI)	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant cofunded by MUR/University and Vrije Universiteit Brussel, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	Evaluation of qualifications will concern: 1. Graduation marks of the second cycle (Master's) degree 2. Curriculum Vitae (included graduation thesis in pdf format) 3. Research experience at universities or research centers 4. Scientific publications 5. Research program submitted by the applicant
Exam Syllabus	The oral examination will be divided into two parts: 1) a scientific interview on the research topics of this PhD program, and on the applicant's research project, that will be evaluated on the basis of project contents, design, feasibility, and relevance for research topics related to this notice of competition; and 2) a motivational interview.
Research Themes	The main research topic concerns: The optimisation, adaptation and validation of the application of the Finite Helical Axis (FHA) approach for the analysis of kinematic data registered by different technologies to capture motion data. (in collaboration with Vrije Universiteit Brussel)
Information on references	Applicants must submit from one to three letters of referees to support their application, which have to be sent to: Prof. Piero Ruggeri, e-mail: ruggeri@unige.it Tel.:+39 010-3538185 and to: Dott.ssa Maria Paola Fenu e-mail: mpfenu@unige.it
Foreign Languages	English
Further Information	Dott.ssa Maria Paola Fenu e-mail: mpfenu@unige.it Prof. Piero Ruggeri, e-mail: ruggeri@unige.it The winners of the co-financed scholarships will carry out their activities on the University Campus of Savona, at the REHELAB laboratory and will be required to spend a period abroad of between 6 and 18 months at the partner university: Vrije Universiteit Brussel

Course: NEUROSCIENCES
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: MOTORY AND SPORTS ACTIVITIES SCIENCES (CODE 10157)

Course Coordinator: Nobili Lino	
Department of Neurosciences, Rehabilitation, Ophthalmology, Genetics and Mother and Child Sciences (Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili – DINOGMI)	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant funded within **PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f)** in collaboration and with the contribution of E.M.A.C. – ELETTRONICA MEDICALE ED ATTREZZATURE CHIMICOCLINICHE S.R.L.; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243. Research project: Development, validation and clinical implementation of a hand strength rehabilitation tool and its integration into a robotic rehabilitation system.	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND EXAM • Assessment of qualifications/publications and the curriculum vitae et studiorum • Written test (research project) • Interview that includes the description of the candidate's research area of interest, also on the basis of previous activities stated in his/her scientific professional curriculum
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	Evaluation of qualifications will concern: 1. Graduation marks of the second cycle (Master's) degree 2. Curriculum Vitae (included graduation thesis in pdf format) 3. Research experience at universities or research centers 4. Scientific publications 5. Research program submitted by the applicant
Exam Syllabus	The oral examination will be divided into two parts: 1) a scientific interview on the research topics of this PhD program, and on the applicant's research project, that will be evaluated on the basis of project contents, design, feasibility, and relevance for research topics related to this notice of competition; and 2) a motivational interview.
Research Themes	The main research topic concerns: Development, validation and clinical implementation of a hand strength rehabilitation tool and its integration into a robotic rehabilitation system
Information on references	Applicants must submit from one to three letters of referees to support their application, which have to be sent to: Prof. Piero Ruggeri, e-mail: ruggeri@unige.it Tel.:+39 010-3538185 and to: Dott.ssa Maria Paola Fenu e-mail: mpfenu@unige.it
Foreign Languages	English
Further Information	Dott.ssa Maria Paola Fenu e-mail: mpfenu@unige.it Prof. Piero Ruggeri, e-mail: ruggeri@unige.it The winners of the Liguria Region scholarships will carry out their activities on the Savona Campus, at the Rehelab laboratory and at the offices of the partner company (EMAC srl). Months to be spent abroad: 0

Course: ROBOTICS AND INTELLIGENT MACHINES – Italian national doctorate

Dottorato di "interesse nazionale" in convenzione con Università di PISA, Università degli Studi di NAPOLI Federico II, Università degli Studi di SIENA, Università degli Studi di TRENTO, Università "Campus Bio-Medico" di ROMA, Politecnico di BARI, Politecnico di MILANO, Università degli Studi di MILANO-BICOCCA, Università della CALABRIA, Università degli Studi di FIRENZE, Università del SALENTO, Università degli Studi di UDINE, Università degli Studi di PADOVA, Libera Università di BOLZANO, Sapienza Università di ROMA, Università degli Studi della Campania "Luigi Vanvitelli", Università degli Studi di PALERMO, Politecnico di TORINO, Università Politecnica delle MARCHE, Università degli Studi di MODENA e REGGIO EMILIA, Università degli Studi di BOLOGNA, Istituto Italiano di Tecnologia (IIT), Consiglio Nazionale delle Ricerche (CNR) e Scuola Superiore Sant'Anna

Curriculum: HEALTHCARE AND WELLNESS OF PERSONS (CODE 10158)

<table>
<tr><td colspan="2">Coordinator: Cannata Giorgio</td></tr>
<tr><td colspan="2">Department of Informatics, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)</td></tr>
<tr><td colspan="2">Places: 3 – Grants: 3 (*)</td></tr>
<tr><td colspan="2">(*) 2 grants funded by University of Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500
o Research themes n, 1, 2
(*) 1 grant funded by proponents the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500
o Research theme n. 5 (Italian Institute of Technology Horizon Europe Programme project HARIA)</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW

<u>Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page</u> https://unige.it/usg/it/dottorati-di-ricerca

Candidates are ranked separately for each research theme they applied.

Step 1 – Assessment of qualifications (maximum 60 points).
Candidates are ranked on the basis (not in order or relevance) of their student career, Curriculum Vitae, motivation letter, qualified scientific and technical skills, endorsement letters.

Candidates are admitted to Step 2 if their score is greater than or equal to 40 points.

Step 2 – Oral examination (maximum 60 points).
The Candidates are expected to discuss about their qualifications and scientific and technical skills, and to show their motivation and attitude for scientific research. Then they are interviewed on the research theme(s) they have applied for (see below) receiving a specific score for each interview.

The oral examination for each research theme is passed if the score is greater than or equal to 40 points.

The final score is the sum of the scores in Step 1 and Step 2 (for each research theme the candidate applied to).</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Candidates <u>must</u>:

– submit the complete list of all the exams sat during their Bachelor's and Master's degree and/or equivalents (BS, Master) specifying the average marks (GPA or equivalent indicator);

– specify up to three research themes of their interest (see the research themes listed below and at Admission – Drim – Irim (i-rim.it));

– submit a motivation letter (Research project) related to one (or more) of the research themes selected; use the template available at: Admission – Drim – Irim (i-rim.it) ;

– submit a Curriculum Vitae including all the technical scientific studies/activities already done and pertinent to the doctoral program;

– submit up to 3 recommendation letters from university professors or recognized experts in the field supporting the candidate;</td></tr>
</table>

Research Themes	1. A "DIVERSITY-AWARE" PERSONAL ROBOT TRAINER WITH SOCIAL ACUITY TO HELP PEOPLE CHANGE UNHEALTHY HABITS – UNIVERSITY OF GENOVA 2. BI-DIRECTIONAL BODY-MACHINE INTERFACES FOR ASSISTANCE AND REHABILITATION – UNIVERSITA' DI GENOVA 5. INTELLIGENT END-EFFECTOR EMBODIMENT AND AUTONOMOUS GRASPING CONTROL PRINCIPLES – ITALIAN INSTITUTE OF TECHNOLOGY For a complete description of the research themes proposed check: Admission – Drim – Irim (i-rim.it)
Information on references	Candidates must choose no more than three recommenders to endorse their candidature. The recommenders must be university professors or recognized experts in the field, and must upload the recommendation letters (specifying their name, role and affiliation), within the deadline of the public notice, to: https://forms.gle/TT4UwLqrjf88Cban6
Foreign Languages	English
Further Information	For more information about - the research themes please check the contact person indicated in the project themes description file available at: Admission – Drim – Irim (i-rim.it) - the doctorate rules and structure please check: RULES – Drim – Irim (i-rim.it) CURRICULA AND THEMES – Drim – Irim (i-rim.it) - for other enquiries contact the Doctorate Secretary: phd_drim@unige.it A step-by-step guideline for the application is available here: Guide for the enrollment confirmation to the PhD courses (unige.it)

Course: ROBOTICS AND INTELLIGENT MACHINES – Italian national doctorate

Dottorato di "interesse nazionale" in convenzione con Università di PISA, Università degli Studi di NAPOLI Federico II, Università degli Studi di SIENA, Università degli Studi di TRENTO, Università "Campus Bio-Medico" di ROMA, Politecnico di BARI, Politecnico di MILANO, Università degli Studi di MILANO-BICOCCA, Università della CALABRIA, Università degli Studi di FIRENZE, Università del SALENTO, Università degli Studi di UDINE, Università degli Studi di PADOVA, Libera Università di BOLZANO, Sapienza Università di ROMA, Università degli Studi della Campania "Luigi Vanvitelli", Università degli Studi di PALERMO, Politecnico di TORINO, Università Politecnica delle MARCHE, Università degli Studi di MODENA e REGGIO EMILIA, Università degli Studi di BOLOGNA, Istituto Italiano di Tecnologia (IIT), Consiglio Nazionale delle Ricerche (CNR) e Scuola Superiore Sant'Anna

Curriculum: HOSTILE AND UNSTRUCTURED ENVIRONMENTS (CODE 10159)

<table>
<tr><td colspan="2">Coordinator: Cannata Giorgio</td></tr>
<tr><td colspan="2">Department of Informatics, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)</td></tr>
<tr><td colspan="2">Places: 16 (°) – Grants: 15 (*)</td></tr>
<tr><td colspan="2">(*) 1 grant funded by University of Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500
o Research Theme n. 8

(*) 10 grants funded by proponents, Italian Institute of Technology, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500
o Research themes n. 1, 2, 3, 4, 5, 6, 11, 12, 13, 14

(*) 2 grants funded by proponents, Italian Institute of Technology, including social security expenses to be paid by the recipient, is € 16.500
o Research theme n. 7 (funded by Horizon Europe Programme project euROBIN (https://www.eurobin-project.eu/) under Grant Agreement No 101070596 – CUP J53C22002180006)

(*) 2 grants funded by proponents, Italian Institute of Technology, including social security expenses to be paid by the recipient, is € 16.500
o Research theme n. 9 (funded by INAIL-IIT for the project BioInterNect)
o Research theme n. 10 ((funded by INAIL-IIT for the project FeatherEXO)

(°) 1 place reserved for foreign state scholar, Italian Institute of Technology</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW

Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca

Candidates are ranked separately for each research theme they applied.

Step 1 – Assessment of qualifications (maximum 60 points).
Candidates are ranked on the basis (not in order or relevance) of their student career,
Curriculum Vitae, motivation letter, qualified scientific and technical skills, endorsement letters.

Candidates are admitted to Step 2 if their score is greater than or equal to 40 points.

Step 2 – Oral examination (maximum 60 points).
The Candidates are expected to discuss about their qualifications and scientific and technical skills, and to show their motivation and attitude for scientific research. Then they are interviewed on the research theme(s) they have applied for (see below) receiving a specific score for each interview.

The oral examination for each research theme is passed if the score is greater than or equal to 40 points.

The final score is the sum of the scores in Step 1 and Step 2 (for each research theme the candidate applied to).</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Candidates must:

– submit the complete list of all the exams sat during their Bachelor's and Master's degree and/or equivalents (BS, Master) specifying the average marks (GPA or equivalent indicator);</td></tr>
</table>

	– specify **up to three research themes** of their interest (see the research themes listed below and at Admission – Drim – Irim (i-rim.it)); – submit **a motivation letter** (Research project) related to one (or more) of the research themes selected; use the template available at: Admission – Drim – Irim (i-rim.it) ; – submit a **Curriculum Vitae** including all the technical scientific studies/activities already done and pertinent to the doctoral program; – submit **up to 3 recommendation letters** from university professors or recognized experts in the field supporting the candidate;
Research Themes	1. SELF-SUPERVISED LEARNING AND REINFORCEMENT LEARNING USING LARGE MULTI-MODAL MODELS (LMM) FOR ACTIVE VISION TASKS – ITALIAN INSTITUTE OF TECHNOLOGY 2. NEUROMORPHIC DISTRIBUTED INTELLIGENCE FOR SOFT ROBOTS – COMPUTATION WITH SPIKING NEURAL NETWORKS FOR HAPTIC PERCEPTION AND CLOSED LOOP CONTROL OF SOFT ROBOTS – ITALIAN INSTITUTE OF TECHNOLOGY 3. NEUROMORPHIC DISTRIBUTED INTELLIGENCE FOR SOFT ROBOTS – DESIGN OF NEUROMORPHIC CIRCUITS ON FLEXIBLE SUBSTRATES FOR SENSING AND COMPUTATION – ITALIAN INSTITUTE OF TECHNOLOGY 4. SOFT ROBOTICS TECHNOLOGIES FOR MARINE ENVIRONMENT – ITALIAN INSTITUTE OF TECHNOLOGY 5. MULTI-ARM CONTROL FOR UNDERWATER MANIPULATION – ITALIAN INSTITUTE OF TECHNOLOGY 6. SOFT ROBOTICS FOR HUMAN COOPERATION AND REHABILITATION – ITALIAN INSTITUTE OF TECHNOLOGY 7. AUTONOMOUS LOCO-MANIPULATION PLANNING FOR LOGISTICS MOBILE ROBOTS – ISTITUTO ITALIANO DI TECNOLOGIA (2 POSITIONS) 8. SITUATIONAL AWARENESS IN MARITIME ENVIRONMENTS – UNIVERSITÀ DI GENOVA 9. MULTIMODAL BIDIRECTIONAL INTERFACES FOR PATIENT-IN-THE-LOOP CONTROL OF ASSISTIVE ROBOTIC DEVICES - ITALIAN INSTITUTE OF TECHNOLOGY 10. ADVANCED MECHATRONICS FOR SOFT ROBOTIC LOWER LIMB EXOSKELETON DEVICE -ITALIAN INSTITUTE OF TECHNOLOGY 11. HUMAN-ROBOT AND ROBOT-ROBOT COLLABORATION WITH QUADRUPED MANIPULATORS ON ROUGH TERRAIN -ITALIAN INSTITUTE OF TECHNOLOGY 12. VISION-BASED TERRAIN CLASSIFICATION FOR QUADRUPED ROBOTS - ITALIAN INSTITUTE OF TECHNOLOGY 13. DEXTEROUS GRIPPERS INSPIRED FROM ASIAN AND AFRICAN ELEPHANT DISTAL TRUNK FOR DRY AND WET ENVIRONMENT -ITALIAN INSTITUTE OF TECHNOLOGY 14. SENSORIZED SOFT HYBRID GRIPPERS FOR AGRICULTURAL AND ENVIRONMENTAL APPLICATIONS -ITALIAN INSTITUTE OF TECHNOLOGY 15. REAL-TIME SCENE RECONSTRUCTION AND MIXED REALITY INTERFACES FOR IMMERSIVE REMOTE TELEROBOTICS – ITALIAN INSTITUTE OF TECHNOLOGY For a complete description of the research themes proposed check: Admission – Drim – Irim (i-rim.it)
Information on references	Candidates must choose no more than three recommenders to endorse their candidature. The recommenders must be university professors or recognized experts in the field, and must upload the recommendation letters (specifying their name, role and affiliation), within the deadline of the public notice, to: https://forms.gle/TT4UwLqrjf88Cban6
Foreign Languages	English

Further Information	For more information about - the research themes please check the contact person indicated in the project themes description file available at: Admission – Drim – Irim (i-rim.it) - the doctorate rules and structure please check: RULES – Drim – Irim (i-rim.it) CURRICULA AND THEMES – Drim – Irim (i-rim.it) - other enquiries contact the Doctorate Secretary: phd_drim@unige.it A step-by-step guideline for the application is available here: Guide for the enrollment confirmation to the PhD courses (unige.it)

Course: ROBOTICS AND INTELLIGENT MACHINES – Italian national doctorate

Dottorato di "interesse nazionale" in convenzione con Università di PISA, Università degli Studi di NAPOLI Federico II, Università degli Studi di SIENA, Università degli Studi di TRENTO, Università "Campus Bio-Medico" di ROMA, Politecnico di BARI, Politecnico di MILANO, Università degli Studi di MILANO-BICOCCA, Università della CALABRIA, Università degli Studi di FIRENZE, Università del SALENTO, Università degli Studi di UDINE, Università degli Studi di PADOVA, Libera Università di BOLZANO, Sapienza Università di ROMA, Università degli Studi della Campania "Luigi Vanvitelli", Università degli Studi di PALERMO, Politecnico di TORINO, Università Politecnica delle MARCHE, Università degli Studi di MODENA e REGGIO EMILIA, Università degli Studi di BOLOGNA, Istituto Italiano di Tecnologia (IIT), Consiglio Nazionale delle Ricerche (CNR) e Scuola Superiore Sant'Anna

Curriculum: INDUSTRY 4.0 (CODE 10160)

<table>
<tr><td colspan="2">Coordinator: Cannata Giorgio</td></tr>
<tr><td colspan="2">Department of Informatics, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)</td></tr>
<tr><td colspan="2">Places: 3 – Grants: 3 (*) [1]</td></tr>
<tr><td colspan="2">(*) 1 grant funded by University of Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500
o Research theme n. 3

(*) 1 grant funded by proponent, Italian Institute of Technology, including social security expenses to be paid by the recipient, is € 16.500
o Research theme n. 4

(*) 1 grant funded by proponent, Politecnico di Milano, including social security expenses to be paid by the recipient is € 16.500
o Research theme n. 5 [1]</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW

Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca

Candidates are ranked separately for each research theme they applied.

Step 1 – Assessment of qualifications (maximum 60 points).
Candidates are ranked on the basis (not in order or relevance) of their student career, Curriculum Vitae, motivation letter, qualified scientific and technical skills, endorsement letters.

Candidates are admitted to Step 2 if their score is greater than or equal to 40 points.

Step 2 – Oral examination (maximum 60 points).
The Candidates are expected to discuss about their qualifications and scientific and technical skills, and to show their motivation and attitude for scientific research. Then they are interviewed on the research theme(s) they have applied for (see below) receiving a specific score for each interview.

The oral examination for each research theme is passed if the score is greater than or equal to 40 points.

The final score is the sum of the scores in Step 1 and Step 2 (for each research theme the candidate applied to).</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Candidates must:

– submit the complete list of all the exams sat during their Bachelor's and Master's degree and/or equivalents (BS, Master) specifying the average marks (GPA or equivalent indicator);

– specify up to three research themes of their interest (see the research themes listed below and at Admission – Drim – Irim (i-rim.it));

– submit a motivation letter (Research project) related to one (or more) of the research themes selected; use the template available at: Admission – Drim – Irim (i-rim.it) ;

– submit a Curriculum Vitae including all the technical scientific studies/activities already done and pertinent to the doctoral program;</td></tr>
</table>

	– submit **up to 3 recommendation letters** from university professors or recognized experts in the field supporting the candidate;
Research Themes	3. SENSOR-BASED CONTROL OF ROBOTS FOR HUMAN-ROBOT COOPERATIVE OPERATIONS – UNIVERSITY OF GENOVA 4. MACHINE LEARNING AND CONTROL FOR ROBOT AUTONOMY IN CONTACT-RICH TASKS- ITALIAN INSTITUTE OF TECHNOLOGY 5. ADVANCED ROBOT PERCEPTION FOR PRECISION HARVESTING - POLITECNICO DI MILANO [1] For a complete description of the research themes proposed check: Admission – Drim – Irim (i-rim.it)
Information on references	Candidates must choose no more than three recommenders to endorse their candidature. The recommenders must be university professors or recognized experts in the field, and must upload the recommendation letters (specifying their name, role and affiliation), within the deadline of the public notice, to: https://forms.gle/TT4UwLqrjf88Cban6
Foreign Languages	English
Further Information	For more information about - the research themes please check the contact person indicated in the project themes description file available at: Admission – Drim – Irim (i-rim.it) - the doctorate rules and structure please check: RULES – Drim – Irim (i-rim.it) CURRICULA AND THEMES – Drim – Irim (i-rim.it) - for other enquiries contact the Doctorate Secretary: phd_drim@unige.it A step-by-step guideline for the application is available here: Guide for the enrollment confirmation to the PhD courses (unige.it)

[1] 1 position with grant added following the addendum to the Agreement with Politecnico di Milano dated 21.11.2023

Course: ROBOTICS AND INTELLIGENT MACHINES – Italian national doctorate

Dottorato di "interesse nazionale" in convenzione con Università di PISA, Università degli Studi di NAPOLI Federico II, Università degli Studi di SIENA, Università degli Studi di TRENTO, Università "Campus Bio-Medico" di ROMA, Politecnico di BARI, Politecnico di MILANO, Università degli Studi di MILANO-BICOCCA, Università della CALABRIA, Università degli Studi di FIRENZE, Università del SALENTO, Università degli Studi di UDINE, Università degli Studi di PADOVA, Libera Università di BOLZANO, Sapienza Università di ROMA, Università degli Studi della Campania "Luigi Vanvitelli", Università degli Studi di PALERMO, Politecnico di TORINO, Università Politecnica delle MARCHE, Università degli Studi di MODENA e REGGIO EMILIA, Università degli Studi di BOLOGNA, Istituto Italiano di Tecnologia (IIT), Consiglio Nazionale delle Ricerche (CNR) e Scuola Superiore Sant'Anna

Curriculum: INDUSTRY 4.0 (CODE 10161)

<table>
<tr><td colspan="2">Coordinator: Cannata Giorgio</td></tr>
<tr><td colspan="2">Department of Informatics, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)</td></tr>
<tr><td colspan="2">Places: 2 – Grants: 2 (*)</td></tr>
<tr><td colspan="2">(*) 1 grant funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f) in collaboration and with the contribution of Hiro Robotics s.r.l.; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243.
Research project: ROBOTICS AND AI FOR ELECTRONIC WASTE RECYCLING

(*) 1 grant funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f) in collaboration and with the contribution of SAIE E&A Società Cooperativa; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243.
Research project: LARGE LANGUAGE MODELS IN THE FIELD OF INDUSTRIAL AUTOMATION</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND EXAM

• Assessment of qualifications/publications and the curriculum vitae et studiorum
• Written test (research project)
• Interview that includes the description of the candidate's research area of interest, also on the basis of previous activities stated in his/her scientific professional curriculum</td></tr>
<tr><td>Interview</td><td>Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca

Candidates are ranked separately for each research theme they applied.

Step 1 – Assessment of qualifications (maximum 60 points).
Candidates are ranked on the basis (not in order or relevance) of their student career, Curriculum Vitae, motivation letter, qualified scientific and technical skills, endorsement letters.

Candidates are admitted to Step 2 if their score is greater than or equal to 40 points.

Step 2 – Oral examination (maximum 60 points).
The Candidates are expected to discuss about their qualifications and scientific and technical skills, and to show their motivation and attitude for scientific research. Then they are interviewed on the research theme(s) they have applied for (see below) receiving a specific score for each interview.

The oral examination for each research theme is passed if the score is greater than or equal to 40 points.

The final score is the sum of the scores in Step 1 and Step 2 (for each research theme the candidate applied to).</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Candidates must:

– submit the complete list of all the exams sat during their Bachelor's and Master's degree and/or equivalents (BS, Master) specifying the average marks (GPA or equivalent indicator);

– specify up to three research themes of their interest (see the research themes listed below and at Admission – Drim – Irim (i-rim.it));

– submit a motivation letter (Research project) related to one (or more) of the research themes selected; use the template available at: Admission – Drim – Irim (i-rim.it) ;</td></tr>
</table>

	– submit a **Curriculum Vitae** including all the technical scientific studies/activities already done and pertinent to the doctoral program; – submit **up to 3 recommendation letters** from university professors or recognized experts in the field supporting the candidate;
Research Themes	Grant funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f) 1. ROBOTICS AND AI FOR ELECTRONIC WASTE RECYCLING 2. LARGE LANGUAGE MODELS IN THE FIELD OF INDUSTRIAL AUTOMATION For a complete description of the research themes proposed check: Admission – Drim – Irim (i-rim.it)
Information on references	Candidates must choose no more than three recommenders to endorse their candidature. The recommenders must be university professors or recognized experts in the field, and must upload the recommendation letters (specifying their name, role and affiliation), within the deadline of the public notice, to: https://forms.gle/TT4UwLqrjf88Cban6
Foreign Languages	English
Further Information	For more information about - the research themes please check the contact person indicated in the project themes description file available at: Admission – Drim – Irim (i-rim.it) - the doctorate rules and structure please check: RULES – Drim – Irim (i-rim.it) CURRICULA AND THEMES – Drim – Irim (i-rim.it) - for other enquiries contact the Doctorate Secretary: phd_drim@unige.it A step-by-step guideline for the application is available here: Guide for the enrollment confirmation to the PhD courses (unige.it) Further information about commitments and conditions of the grants funded within **PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f)** are available in the Notice of competition (article 6, paragraph 6) Months to be spent abroad: 0

Course: ROBOTICS AND INTELLIGENT MACHINES – Italian national doctorate

Dottorato di "interesse nazionale" in convenzione con Università di PISA, Università degli Studi di NAPOLI Federico II, Università degli Studi di SIENA, Università degli Studi di TRENTO, Università "Campus Bio-Medico" di ROMA, Politecnico di BARI, Politecnico di MILANO, Università degli Studi di MILANO-BICOCCA, Università della CALABRIA, Università degli Studi di FIRENZE, Università del SALENTO, Università degli Studi di UDINE, Università degli Studi di PADOVA, Libera Università di BOLZANO, Sapienza Università di ROMA, Università degli Studi della Campania "Luigi Vanvitelli", Università degli Studi di PALERMO, Politecnico di TORINO, Università Politecnica delle MARCHE, Università degli Studi di MODENA e REGGIO EMILIA, Università degli Studi di BOLOGNA, Istituto Italiano di Tecnologia (IIT), Consiglio Nazionale delle Ricerche (CNR) e Scuola Superiore Sant'Anna

Curriculum: INSPECTION AND MAINTENANCE OF INFRASTRUCTURES (CODE 10162)

<table>
<tr><td colspan="2">Coordinator: Cannata Giorgio</td></tr>
<tr><td colspan="2">Department of Informatics, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)</td></tr>
<tr><td colspan="2">Places: 3 – Grants: 3 (*)</td></tr>
<tr><td colspan="2">(*) 1 grants funded by University of Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500
o Research theme n. 2

(*) 2 grants funded by proponents, Italian Institute of Technology, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500
o Research themes n. 3,4</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW

<u>Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page</u> https://unige.it/usg/it/dottorati-di-ricerca

Candidates are ranked separately for each research theme they applied.

Step 1 – Assessment of qualifications (maximum 60 points).
Candidates are ranked on the basis (not in order or relevance) of their student career, Curriculum Vitae, motivation letter, qualified scientific and technical skills, endorsement letters.

Candidates are admitted to Step 2 if their score is greater than or equal to 40 points.

Step 2 – Oral examination (maximum 60 points).
The Candidates are expected to discuss about their qualifications and scientific and technical skills, and to show their motivation and attitude for scientific research. Then they are interviewed on the research theme(s) they have applied for (see below) receiving a specific score for each interview.

The oral examination for each research theme is passed if the score is greater than or equal to 40 points.

The final score is the sum of the scores in Step 1 and Step 2 (for each research theme the candidate applied to).</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Candidates <u>must</u>:

– submit the complete list of all the exams sat during their Bachelor's and Master's degree and/or equivalents (BS, Master) specifying the average marks (GPA or equivalent indicator);

– specify up to three research themes of their interest (see the research themes listed below and at Admission – Drim – Irim (i-rim.it));

– submit a motivation letter (Research project) related to one (or more) of the research themes selected; use the template available at: Admission – Drim – Irim (i-rim.it) ;

– submit a Curriculum Vitae including all the technical scientific studies/activities already done and pertinent to the doctoral program;

– submit up to 3 recommendation letters from university professors or recognized experts in the field supporting the candidate;</td></tr>
<tr><td>Research Themes</td><td>2. UNDERWATER INSPECTION AND MAINTENANCE WITH MARINE ROBOTS -</td></tr>
</table>

	UNIVERSITÀ DI GENOVA 3. COLLABORATIVE AND AUTONOMOUS OBJECT TRANSPORTATION – ITALIAN INSTITUTE OF TECHNOLOGY 4. LOCOMOTION PLANNING AND CONTROL OF A HYBRID LEGGED/WHEELED QUADRUPED – ITALIAN INSTITUTE OF TECHNOLOGY For a complete description of the research themes proposed check: Admission – Drim – Irim (i-rim.it)
Information on references	Candidates must choose no more than three recommenders to endorse their candidature. The recommenders must be university professors or recognized experts in the field, and must upload the recommendation letters (specifying their name, role and affiliation), within the deadline of the public notice, to: https://forms.gle/TT4UwLqrjf88Cban6
Foreign Languages	English
Further Information	For more information about - the research themes please check the contact person indicated in the project themes description file available at: Admission – Drim – Irim (i-rim.it) - the doctorate rules and structure please check: RULES – Drim – Irim (i-rim.it) CURRICULA AND THEMES – Drim – Irim (i-rim.it) - for other enquiries contact the Doctorate Secretary: phd_drim@unige.it A step-by-step guideline for the application is available here: Guide for the enrollment confirmation to the PhD courses (unige.it)

Course: ROBOTICS AND INTELLIGENT MACHINES – Italian national doctorate

Dottorato di "interesse nazionale" in convenzione con Università di PISA, Università degli Studi di NAPOLI Federico II, Università degli Studi di SIENA, Università degli Studi di TRENTO, Università "Campus Bio-Medico" di ROMA, Politecnico di BARI, Politecnico di MILANO, Università degli Studi di MILANO-BICOCCA, Università della CALABRIA, Università degli Studi di FIRENZE, Università del SALENTO, Università degli Studi di UDINE, Università degli Studi di PADOVA, Libera Università di BOLZANO, Sapienza Università di ROMA, Università degli Studi della Campania "Luigi Vanvitelli", Università degli Studi di PALERMO, Politecnico di TORINO, Università Politecnica delle MARCHE, Università degli Studi di MODENA e REGGIO EMILIA, Università degli Studi di BOLOGNA, Istituto Italiano di Tecnologia (IIT), Consiglio Nazionale delle Ricerche (CNR) e Scuola Superiore Sant'Anna

Curriculum: INSPECTION AND MAINTENANCE OF INFRASTRUCTURES (CODE 10163)

<table>
<tr><td colspan="2">Coordinator: Cannata Giorgio</td></tr>
<tr><td colspan="2">Department of Informatics, Bioengineering, Robotics and Systems Engineering (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi – DIBRIS)</td></tr>
<tr><td colspan="2">Places: 1 – Grants: 1 (*)</td></tr>
<tr><td colspan="2">(*) 1 grant funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f) in collaboration and with the contribution of JPDRONI S.p.A.; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243.
Research project: AUTONOMOUS MULTIROTOR AERIAL DRONES FOR THE INSPECTION OF INDUSTRIAL FACILITIES</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND EXAM

• Assessment of qualifications/publications and the curriculum vitae et studiorum
• Written test (research project)
• Interview that includes the description of the candidate's research area of interest, also on the basis of previous activities stated in his/her scientific professional curriculum</td></tr>
<tr><td>Interview</td><td>Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca

Candidates are ranked separately for each research theme they applied.

Step 1 – Assessment of qualifications (maximum 60 points).
Candidates are ranked on the basis (not in order or relevance) of their student career, Curriculum Vitae, motivation letter, qualified scientific and technical skills, endorsement letters.

Candidates are admitted to Step 2 if their score is greater than or equal to 40 points.

Step 2 – Oral examination (maximum 60 points).
The Candidates are expected to discuss about their qualifications and scientific and technical skills, and to show their motivation and attitude for scientific research. Then they are interviewed on the research theme(s) they have applied for (see below) receiving a specific score for each interview.

The oral examination for each research theme is passed if the score is greater than or equal to 40 points.

The final score is the sum of the scores in Step 1 and Step 2 (for each research theme the candidate applied to).</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Candidates must:

– submit the complete list of all the exams sat during their Bachelor's and Master's degree and/or equivalents (BS, Master) specifying the average marks (GPA or equivalent indicator);

– specify up to three research themes of their interest (see the research themes listed below and at Admission – Drim – Irim (i-rim.it));

– submit a motivation letter (Research project) related to one (or more) of the research themes selected; use the template available at: Admission – Drim – Irim (i-rim.it) ;

– submit a Curriculum Vitae including all the technical scientific studies/activities already done and pertinent to the doctoral program;

– submit up to 3 recommendation letters from university professors or recognized experts in the field supporting the candidate;</td></tr>
<tr><td>Research Themes</td><td>Grant funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-</td></tr>
</table>

	2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f) 1. AUTONOMOUS MULTIROTOR AERIAL DRONES FOR THE INSPECTION OF INDUSTRIAL FACILITIES – JPDRONI S.P.A. AND UNIVERSITÀ DI GENOVA For a complete description of the research themes proposed check: Admission – Drim – Irim (i-rim.it)
Information on references	Candidates must choose no more than three recommenders to endorse their candidature. The recommenders must be university professors or recognized experts in the field, and must upload the recommendation letters (specifying their name, role and affiliation), within the deadline of the public notice, to: https://forms.gle/TT4UwLqrjf88Cban6
Foreign Languages	English
Further Information	For more information about - the research themes please check the contact person indicated in the project themes description file available at: Admission – Drim – Irim (i-rim.it) - the doctorate rules and structure please check: RULES – Drim – Irim (i-rim.it) CURRICULA AND THEMES – Drim – Irim (i-rim.it) - for other enquiries contact the Doctorate Secretary: phd_drim@unige.it A step-by-step guideline for the application is available here: Guide for the enrollment confirmation to the PhD courses (unige.it) Further information about commitments and conditions of the grants funded within **PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f)** are available in the Notice of competition (article 6, paragraph 6) Months to be spent abroad: 0

Course: MARINE SCIENCES AND TECHNOLOGIES

Curriculum: NAVAL AND NAUTICAL DESIGN (CODE 10164)

Course Coordinator: Ferrari Claudio	
Centro del Mare	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant funded by Università degli Studi di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Research Themes	• Industrialization of the nautical product • Sustainability of the nautical product • Enhancement of the existing nautical heritage • Visual communication and the nautical product
Information on references	Applicants should choose no fewer than one and no more than three referees to support the application The referees must be university professors or experts in the subject. Referees shall directly send endorsement letters, within the deadline of the notice, to the following address e-mail: zignego@arch.unige.it and mariaelisabetta.ruggiero@unige.it In the application form, candidates must indicate the name, position and place of service of the references they have chosen.
Foreign Languages	English

Course: MARINE SCIENCES AND TECHNOLOGIES

Curriculum: NAVAL ARCHITECTURE AND MARINE ENGINEERING - MARINE TECHNOLOGIES (CODE 10165)

Course Coordinator: Ferrari Claudio	
Centro del Mare	
Places: 2 – **Grants**: 2 (*)	
(*) 2 grants funded within **PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f)** in collaboration and with the contribution of FINCANTIERI Spa; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243. Research projects: - Application of autonomous digital and robotic technologies to inspection and control of shipbuilding; - Decarbonization technologies for current and future navy ships	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND EXAM • Assessment of qualifications/publications and the curriculum vitae et studiorum • Written test (research project) • Interview that includes the description of the candidate's research area of interest, also on the basis of previous activities stated in his/her scientific professional curriculum
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	Applicants will: 1) submit a research project (maximum 10 pages A4 format); 2) an updated CV; Italian candidates not yet graduated must present the list with a score of the exams taken in the master degree.
Exam Syllabus	The interview will focus on the topics of the proposed research project and on related issues.
Research Themes	Research project for grant within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f): Research projects: - Application of autonomous digital and robotic technologies to inspection and control of shipbuilding; - Decarbonization technologies for current and future navy ships
Information on references	Candidates must choose not less than one and not more than three referees to support their application. The referees must be university professors or experts in the subject. Referees shall directly send endorsement letters, within the deadline of the notice, to the following address e-mail: cesare.rizzo@unige.it In their application, candidates must indicate the name, qualification and place of employment of the chosen referees.
Foreign Languages	English
Further Information	Further information about commitments and conditions of the grants funded within **PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f)** are available in the Notice of competition (article 6, paragraph 6) Months to be spent abroad: 3

Course: MARINE SCIENCES AND TECHNOLOGIES

Curriculum: LOGISTICS AND TRANSPORTATION (CODE 10166)

Course Coordinator: Ferrari Claudio	
Centro del Mare	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant funded within PNRR – CN MOST; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500 (CUP D33C22000940007)	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	Qualifications and publications must be attached to the application form.
Exam Syllabus	The interviews will assess the candidates' knowledge of the transport sector (shipping and ports) in its multidisciplinary aspects and their aptitude for scientific research as well as their understanding of the English language.
Research Themes	PNRR National Centre for Sustainable Mobility: Strategies, investment options and green and smart technologies for the shipping industry: evaluation criteria, KPI, Dashboards, Decision Management System and DSS
Information on references	Letters of reference should be sent to: cieli@unige.it claudio.ferrari@unige.it
Foreign Languages	English

Course: SCIENCES AND TECHNOLOGIES OF CHEMISTRY AND MATERIALS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: DRUG DISCOVERY AND NANOBIOTECHNOLOGIES (CODE 10167)

<table>
<tr><td colspan="2">Course Coordinator: Riva Renata</td></tr>
<tr><td colspan="2">Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI)</td></tr>
<tr><td colspan="2">Places: 1 – Grants: 1 (*)</td></tr>
<tr><td colspan="2">(*) 1 grant funded by IIT, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATION</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Evaluable qualifications:
• educational qualifications with marks;
• transcript of records (list of exams with marks);
• recommendation letters (maximum three);
• research project written in English;
• curriculum vitae et studiorum;
• additional qualifications (postgraduate qualifications, publications in scientific journals, congress presentations, patents, study or research awards).

All candidates have to attach to the application the certificates related to all the academic qualifications, reporting the mark and duration of the study cycles. For students not yet graduated, who are admitted sub condicione, the presentation of the certificate is required with the marks obtained in the individual exams.
Foreign applicants must also clearly report the number of years corresponding to each cycle of studies carried out before enrolling in the University.
In case of admission to the doctorate, the candidate will carry out his research not necessarily in the specific activities described in the project he/she has presented.</td></tr>
<tr><td>Exam Syllabus</td><td>The candidate will discuss in English the research project he/she has presented. The Committee will evaluate the research project for its originality, feasibility, methodology, timeline and relevance within the research topics listed in the call. In this way, the Committee will be able to evaluate the candidate’s attitude to develop a scientific project. The interview will allow the Committee to ascertain the candidates knowledge of English language.</td></tr>
<tr><td>Research Themes</td><td>Exploring new Nanozyme functionalities and applications</td></tr>
<tr><td>Information on references</td><td>Candidates must provide not less than one and not more than three recommendation letters to support their application. The referees are university professors or experts in the research topics of the PhD course and they must provide the letters within the deadline of the call, exclusively by e-mail to phd_d3@iit.it (subject: PhD_letter).
The name, status and place of employment of the referees of the recommendation letters must be stated in the application.</td></tr>
<tr><td>Foreign Languages</td><td>English</td></tr>
<tr><td>Further Information</td><td>Dr. Pier Paolo Pompa
pierpaolo.pompa@iit.it

Administrative contact person
Dr. Ilaria Rapone
(+39) 0102896772
ilaria.rapone@iit.it

Further information on the research themes: https://chimica.unige.it/en/doctorate-themes</td></tr>
</table>

Course: SCIENCES AND TECHNOLOGIES OF CHEMISTRY AND MATERIALS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: NANOCHEMISTRY (CODE 10168)

<table>
<tr><td colspan="2">Course Coordinator: Riva Renata</td></tr>
<tr><td colspan="2">Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI)</td></tr>
<tr><td colspan="2">Places: 2 – Grants: 2 (*)</td></tr>
<tr><td colspan="2">(*) 2 grants funded by IIT, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00.</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Evaluable qualifications:
• educational qualifications with marks;
• transcript of records (list of exams with marks);
• recommendation letters (maximum three);
• research project written in English;
• curriculum vitae et studiorum;
• additional qualifications (postgraduate qualifications, publications in scientific journals, congress presentations, patents, study or research awards).

All candidates have to attach to the application the certificates related to all the academic qualifications, reporting the mark and duration of the study cycles. For students not yet graduated, who are admitted sub condicione, the presentation of the certificate is required with the marks obtained in the individual exams. The provision of the title and a short M.Sc. thesis abstract is recommended.
Foreign applicants must also clearly report the number of years corresponding to each cycle of studies carried out before enrolling in the University.
In case of admission to the doctorate, the candidate will carry out his research not necessarily in the specific activities described in the project he/she has presented.</td></tr>
<tr><td>Research Themes</td><td>1. Innovative nanocavities coupled to emissive nanomaterials for light-matter interaction.
2. Anti-inflammatory and anti-fibrotic activity of novel organic materials based on Sulfur (II)-containing polymers.</td></tr>
<tr><td>Information on references</td><td>Candidates must provide not less than one and not more than three recommendation letters to support their application. The authors are university professors or experts in the research topics of the PhD course and they must provide the letters within the deadline of the call, exclusively by e-mail to phd_nach@iit.it (subject: PhD_letter).
The name, status and place of employment of the authors of the recommendation letters must be stated in the application.</td></tr>
<tr><td>Foreign Languages</td><td>English</td></tr>
<tr><td>Further Information</td><td>Administrative contact person
Dr. Iulia Manolache
Tel: (+39) 0102896718
iulia.manolache@iit.it

Further information on the research themes: https://chimica.unige.it/en/doctorate-themes</td></tr>
</table>

Course: SCIENCES AND TECHNOLOGIES OF CHEMISTRY AND MATERIALS
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: SCIENCE AND TECHNOLOGY OF MATERIALS (CODE 10169)

<table>
<tr><td colspan="2">Course Coordinator: Riva Renata</td></tr>
<tr><td colspan="2">Department of Chemistry and Industrial Chemistry (Dipartimento di Chimica e Chimica Industriale – DCCI)</td></tr>
<tr><td colspan="2">Places: 1 – Grants: 1 (*)</td></tr>
<tr><td colspan="2">(*) 1 grant funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f) in collaboration and with the contribution of Angelini S.p.a; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243.
Research project: Synthesis and electrochemical production process of sodium hypochlorite: investigation and optimization of key process parameters.</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND EXAM

• Assessment of qualifications/publications and the curriculum vitae et studiorum
• Written test (research project)
• Interview that includes the description of the candidates research area of interest, also on the basis of previous activities stated in his/her scientific professional curriculum</td></tr>
<tr><td>Interview</td><td>Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Evaluable qualifications:
• educational qualifications with marks;
• transcript of records (list of exams with marks);
• recommendation letters (maximum three);
research project written in Italian or English;
• curriculum vitae et studiorum;
• additional qualifications (postgraduate qualifications, publications in scientific journals, congress presentations, patents, study or research awards).

All candidates have to attach to the application the certificates related to all the academic qualifications, reporting the mark and duration of the study cycles. For students not yet graduated, who are admitted sub condicione, the presentation of the certificate is required with the marks obtained in the individual exams.
Foreign applicants must also clearly report the number of years corresponding to each cycle of studies carried out before enrolling in the University.
In case of admission to the doctorate, the candidate will carry out his research not necessarily in the specific activities described in the project he/she has presented.</td></tr>
<tr><td>Exam Syllabus</td><td>The candidate will discuss with the Committee the research project he/she has presented. The Committee will evaluate the research project for its originality, feasibility, methodology, timeline and relevance within the research topics listed in the call. In this way the Committee will be able to evaluate the candidates attitude to develop a scientific project. During the presentation the Committee will ascertain the candidate knowledge of English language.</td></tr>
<tr><td>Research Themes</td><td>Research project for grant within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f): Synthesis and electrochemical production process of sodium hypochlorite: investigation and optimization of key process parameters.</td></tr>
<tr><td>Information on references</td><td>Candidates must provide not less than one and not more than three recommendation letters to support their application. The authors are university professors or experts in the research topics of the PhD course and they must provide the letters within the deadline of the call, exclusively by e-mail to Paola.Riani@unige.it (subject: PhD_letter).
The name, status and place of employment of the authors of the recommendation letters must be stated in the applicat</td></tr>
<tr><td>Foreign Languages</td><td>English</td></tr>
<tr><td>Further Information</td><td>Prof. Paola Riani
(+39) 0103356174
Paola.Riani@unige.it

Administrative contact person
Ms. Noemi Pretelli</td></tr>
</table>

	(+39) 0103358752 dottorato_STCM@unige.it Further information on the research theme: https://chimica.unige.it/en/doctorate-themes Further information about commitments and conditions of the grants funded within **PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f)** are available in the Notice of competition (article 6, paragraph 6) Months to be spent abroad: 0

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

Curriculum: EARTH SCIENCES (CODE 10209) [1]

Course Coordinator: Scambelluri Marco	
Department of Earth, Environmental and Life Sciences (Dipartimento di Scienze della Terra, dell'Ambiente e della Vita – DISTAV)	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant funded in the context of Agenzia per la Coesione territoriale, under condition to the approval the project. The annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00;	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	By titles are meant all information contained in the application form and in the documents attached to it. The application must be accompanied by: a) the candidate's *curriculum vitae et studiorum* (maximum ten pages), with indication of the degree mark. b) a research project relating to one of the research topics published in the call for the XXXIX cycle of the Doctorate in Sciences and Technologies for the Earth and the Environment of the University of Genoa (Earth Sciences curriculum; maximum ten pages). c) a document containing the title and an abstract of the Master' s degree thesis, together with the list of exams taken and their marks. d) any additional documented qualification acquired during the candidate's career and relating to the proposed research project and to the research topics pertinent to the PhD Program (maximum ten pages). e) from minimum one to maximum three reference letters. In the application form candidates must indicate the names, qualification and Institution of referents writing the support letters. Candidates can write their project and application forms either in Italian or in English
Exam Syllabus	The interview will deal with: 1. the general knowledge of geological themes, processes and topics of general interest and of specific interest to the proposed research. 2. an in-depth discussion of the activity carried out by the PhD candidate during his/her studies and during the master degree thesis. The interview will also test the candidate's knowledge of basic topics, of analytical and work tools and of the experimental methodologies pertinent to the research topic dealt with in the project presented. 3. the specific research topic that the candidate aims to develop during the research doctorate. 4. an evaluation of the candidate's knowledge of the English language.
Research Themes	Hereafter the title of the research topics of the STAT Doctorate fellowship (XXXIX Cycle, Earth Sciences curriculum): more detailed information is available on the STAT PhD website (http://www.distav.unige.it/phdstat/it - Research topics). n.1 Fellowship funded by the Agenzia per la Coesione territoriale (Fondo per lo sviluppo e la coesione). Projects on themes other than the one listed below are evaluated with zero points: Identification, analysis and mitigation of geo-hydrological hazard for the purposes of conservation and enhancement of the cultural and landscape heritage of the Vara Valley
Information on references	In accordance with article 3 paragraph 3 of the call, the candidate must choose minimum one, up to three referents supporting their PhD application. In their application forms, the PhD candidates must indicate the name, qualification and Institution of each referent. Referents must be University professors and researchers, or well-known experts in the subject. Referents must send their letters in "pdf" format, within the deadline for submitting the application to Prof. Prof. Marco Scambelluri (marco.scambelluri@unige.it, the responsible for the Doctorate curriculum).
Foreign Languages	English
Further Information	Further information is available on the doctorate website (http://www.distav.unige.it/phdstat/it) and can be requested to • Prof. Marco Scambelluri (marco.scambelluri@unige.it) • Prof. Francesco Faccini (faccini@unige.it) for research theme n. 1

[1] Curriculum added following the note of the PhD coordinator dated 24.11.2023

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

Curriculum: ELECTRICAL ENGINEERING (CODE 10170)

Course Coordinator: Marchesoni Mario	
Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni – DITEN)	
Places: 2 – **Grants**: 2	
(*) 1 grant funded by Università degli Studi di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00. (*) 1 grant cofunded by MUR/Department (DITEN), the annual gross amount of the grant, including social security expenses to	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	Applicants will have to submit: 1) a research project up to 10 pages long; 2) an updated CV; 3) a short abstract of the master's thesis, if available. Candidates who have not yet graduated must present the list and the marks of the exams passed in the master's degree program up to the moment of submission of the application.
Exam Syllabus	Interview on the submitted research project, the PhD course topics, and the candidate's specific interests in the field. English language test.
Research Themes	(A) Automation: industry, process and transport. Manufacturing plants modeling. Management, monitoring and control of electrical systems. Innovative techniques and optimization for electromagnetic device design. Electric drives for robotics, manufacturing automation and processes. Advanced instrumentation and fieldbus applications. (B) Energy: Protection from electrostatic hazard. Insulation defects evaluation with partial discharge measurement. Technical-economic evaluations for the energy market. Distributed generation. Quality of service. Optimization algorithms, distribution management systems, load forecasts and renewable energy resources, with methods based on artificial intelligence, data mining, big data and probabilistic safety assessment. Switches, machines, electric actuators and magnetic devices for energy storage. Static energy converters. (C) Electronics: Modeling of power electronic systems and components. Advanced control techniques for converters. Electrostatic discharge protection systems for electronic devices. Complex systems modeling. Analysis and synthesis of circuits and nonlinear dynamic systems. Neural networks. Electronic systems design. (D) Electromagnetic compatibility among electrical, power electronic and communications systems. Modeling, simulation and measurement methods. Lightning current numerical modeling. Electromagnetic modeling with full Maxwell approach. (E) Transport: Modeling for RAMS predictive analysis. Electrified systems for public transport. Energy management of electric and hybrid vehicles. Electric traction motor diagnostics. Electric drives for rail traction, road and ship propulsion. (F) Environment: Numerical simulation and measurement and field reduction techniques. Optimized design of low emission devices. Low environmental impact systems.
Information on references	Candidates must choose not less than one and not more than three referees to support the application. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to Prof. Andrea Formentini at the following address: andrea.formentini@unige.it The name, status and service place of the referees chosen by the candidates must be stated in their applications.
Foreign Languages	English

Further Information	Prof. Mario Marchesoni University of Genova DITEN (Department of Electrical, Electronics and Telecommunication Engineering and Naval Architecture) Via all'Opera Pia 11a, I-16145 - Genova, Italy mario.marchesoni@unige.it tel: +39 0103532183; fax: +39 0103532700; Laura Brunelli University of Genova DITEN (Department of Electrical, Electronics and Telecommunication Engineering and Naval Architecture) Via all'Opera Pia 11a, I-16145 - Genova, Italy brunelli@dinav.unige.it tel: +39 0103532286; fax: + 39 0103532777

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

Curriculum: COMPLEX SYSTEMS FOR MOBILITY (CODE 10171)

<table>
<tr><td colspan="2">Course Coordinator: Marchesoni Mario</td></tr>
<tr><td colspan="2">Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni – DITEN)</td></tr>
<tr><td colspan="2">Places: 1 – Grants: 1 (*)</td></tr>
<tr><td colspan="2">(*) 1 grant funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f) in collaboration and with the contribution of CETENA S.p.A.; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243.
Research project: Integrated Controls of Marine Electric Power Systems: Dynamic modeling of complex electrical systems and their optimal shipboard management and control systems</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND EXAM

• Assessment of qualifications/publications and the curriculum vitae et studiorum
• Written test (research project)
• Interview that includes the description of the candidate’s research area of interest, also on the basis of previous activities stated in his/her scientific professional curriculum</td></tr>
<tr><td>Interview</td><td>Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>Applicants will have to submit:
1) a research project up to 10 pages long, relating to one of the topics listed below in the "Research Themes”; 2) an updated CV; 3) a short abstract of the master's thesis, if available. Candidates who have not yet graduated must present the list and the marks of the exams</td></tr>
<tr><td>Exam Syllabus</td><td>Interview on the submitted research project, the PhD course topics, and the candidate's specific interests in the field. English language test.</td></tr>
<tr><td>Research Themes</td><td>Curriculum’s Research Theme

(A) Integrated Controls of Marine Electric Power Systems: Dynamic modeling of complex electrical systems and their optimal shipboard management and control systems
(B) Complex systems in electrical and naval engineering: electrical networks, naval systems, automation systems.
(C) Components and technological systems for means of transport that allow to reduce the external costs of transport and to raise safety levels: electric propulsion systems for road or rail electric and hybrid vehicles, management of the energy flows of such vehicles, modeling for predictive RAMS analysis, traffic management and control systems in constrained driving systems, electronics and electric traction drives.
(D) Modeling of complex systems: formulation / identification of mathematical models (starting from experimental data) and their analysis and numerical simulation. The models will mainly refer to the electrical and naval sector, but they also may concern more general problems whose solution is of application interest for these sectors (for example, electrical activity of neuron networks or circuits).

Research theme of the grant funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f): Integrated Controls of Marine Electric Power Systems: Dynamic modeling of complex electrical systems and their optimal shipboard management and control systems</td></tr>
<tr><td>Information on references</td><td>Candidates must choose not less than one and not more than three referees to support the application. These referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to Prof. Federico Silvestro at the following address: federico.silvestro@unige.it
The name, status and service place of the referees chosen by the candidates must be stated in their applications.</td></tr>
<tr><td>Foreign Languages</td><td>English</td></tr>
<tr><td>Further Information</td><td>Further information about commitments and conditions of the grants funded within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f) are available in the Notice of competition (article 6, paragraph 6)

Months to be spent abroad: 3</td></tr>
</table>

Course: SCIENCE AND TECHNOLOGY FOR ELECTRONIC AND TELECOMMUNICATION ENGINEERING
In agreement with the Foundation of the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia – IIT)

Curriculum: ELECTROMAGNETISM, ELECTRONICS, TELECOMMUNICATIONS (CODE 10172)

Course Coordinator: Valle Maurizio	
Department of Marine, Electrical, Electronic and Telecommunications Engineering (Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni – DITEN)	
Places: 1 (°) – **Grants**: 0	
(°) 1 position reserved for employees of Centro di Competenza per la Sicurezza e l'Ottimizzazione delle Infrastrutture Strategiche - START 4.0	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	In presenting their CV, it is important for candidates to highlight the following features as they will be used as evaluation parameters: publications (e.g. in International Journals, International Conferences, Book Chapters), the degree mark (or equivalent qualification) obtained, work experience and acquired skills. It is also important for candidates to highlight the following features when presenting their research project as they will be used as evaluative parameters: Relevance to the research themes that appear in this public exam, Originality, Execution modalities, Feasibility, Clear presentation/exposition. A possible outline for the presentation of the research project plan, which must not exceed 10 pages, is the following: - motivations and logic foundation; - state of the art; - objectives; - methods employed; - preliminary workplan; - expected outcomes; - bibliography.
Exam Syllabus	The interview will aim to verify the candidate's competence in relation to the listed research topics and the methodological ability to deal with research projects. In addition, the interview will also focus on the content of the research project, inherent to one of the listed research themes, submitted by the candidate. The interviews may also take place electronically through MS Teams with video mode enabled to check the candidate's identity, upon request sent by e-mail to the Coordinator of the Doctoral Course, Prof. Maurizio Valle (maurizio.valle@unige.it), subject: Interview Ph.D. STIET XXXVIII cycle.
Research Themes	Study and performance evaluation of hardware and software solutions for the detection and esponse to events relating to cyber-physical security in the industrial sector.
Information on references	Candidates MUST choose AT LEAST one and not more than three referees to support their candidacy. The referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following e-mail address maurizio.valle@unige.it, with subject: Ph.D. STIET XXXVIII cycle_ Candidate Name_ reference letter The candidate MUST indicate in the submitted application names, status and affiliation of the referees. The referees MUST clearly indicate in the reference letters the supported candidate's aptitude to scientific research development.
Foreign Languages	English
Further Information	Prof. Maurizio Valle DITEN - Università di Genova Via Opera Pia 11A 16145, Genova, Italy maurizio.valle@unige.it

Course: SECURITY, RISK AND VULNERABILITY
Doctoral Course in agreement with the Bruno Kessler Foundation (Fondazione Bruno Kessler – FBK) and CIMA Foundation

Curriculum: CYBERSECURITY AND RELIABLE ARTIFICIAL INTELLIGENCE (CODE 10173)

Course Coordinator: Armando Alessandro	
Centro Strategico Interdipartimentale su Sicurezza, Rischio e Vulnerabilità	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant funded within Security and Rights in the CyberSpace (SERICS) Partnership (PNRR MUR - M4C2 - Investment 1.3 - Notice "Partnerships Extended to Universities, Research Centers, Companies for Funding Basic Research Projects" - D.D. No. 341 of March 15, 2022) - CUP D33C22001300002, Spoke 4 (Security of Operating Systems and Virtualization), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500.	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	Candidates can choose up to a maximum of 2 research topics among those listed below and submit ● a research project, up to a maximum of 10 pages, which should highlight the candidate's motivations and research interests. The project should include a summary, a state of the art section completed with relevant publications, and the objectives of the activity; ● a document from the university that awarded their degree (transcript of records), which shows the courses and grades obtained throughout their academic career (Bachelor and M.Sc.), specifying the GPA or equivalent indicator. Candidates who do not yet possess the degree required for admission to the doctoral program at the time of the deadline may submit additional documentation that they consider more appropriate to document their academic career; ● a curriculum.
Exam Syllabus	The interview will be a detailed scientific discussion on the candidate's research project (10 pages max), Curriculum Vitae et Studiorum (10 pages max) and qualifications/publications (10 pages max). The interview is also aimed at verifying that the candidate has adequate knowledge to deal with studies in the chosen curriculum.
Research Themes	• Security of Operating Systems and Virtualization - Grant DIBRIS on Partenariato Esteso SERICS Additional information about the research projects can be found on the webpage https://sicurezza.unige.net/admission/how-to-apply/themes-csrai-xxxix-october-2023
Information on references	Candidates must choose no less than 2 and no more than 3 references in support of their application. These references must be university professors or subject matter experts. If the reference is not a university professor, a Curriculum Vitae and a list of publications from the reference are required. It is the responsibility of the references to send the reference letters to the Curriculum Coordinator at the following address: luca.oneto@unige.it, by the application deadline. In the admission application, candidates must provide the full name, position, and affiliation of the chosen references. Reference letters that are not submitted as requested will not be considered.
Foreign Languages	English
Further Information	PhD Coordinator: Alessandro Armando, DIBRIS, Via Dodecaneso 35, Genova alessandro.armando@unige.it Curriculum Coordinator: Prof. Luca Oneto DIBRIS, Opera Pia 11a, Genova luca.oneto@unige.it PhD Course Web Page http://sicurezza.unige.it

Course: SECURITY, RISK AND VULNERABILITY
Doctoral Course in agreement with the Bruno Kessler Foundation (Fondazione Bruno Kessler – FBK) and CIMA Foundation

Curriculum: SECURITY AND LAW (CODE 10174)

<table>
<tr><td colspan="2">Course Coordinator: Armando Alessandro</td></tr>
<tr><td colspan="2">Centro Strategico Interdipartimentale su Sicurezza, Rischio e Vulnerabilità</td></tr>
<tr><td colspan="2">Places: 1 (°) – Grants: 0</td></tr>
<tr><td colspan="2">(°) 1 place reserved for employees of the Universidad de Especialidades Espíritu Santo (UEES), Graduate School of Law</td></tr>
<tr><td>Comparative assessment procedure</td><td>QUALIFICATIONS/PUBLICATIONS AND INTERVIEW</td></tr>
<tr><td>Interview</td><td>Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca</td></tr>
<tr><td>Further information on how to present qualifications/publications</td><td>“Qualifications” the information contained in the application and in the curriculum vitae et studiorum, the research project, further qualifications.
The application form and its attachment can be written in Italian or English or French or Spanish.</td></tr>
<tr><td>Exam Syllabus</td><td>The comparative assessment will be based on an evaluation of the candidate's qualifications, a research project and an interview designed to assess the skills and knowledge required for admission to a PhD programme. More specifically:

- The RESEARCH PROJECT must fit into some of the research topics of the PhD programme. It must contain (i) a clearly defined research problem, indicate (ii) basic metodological choices, list (iii) the main bibliography, and give (iv) a rough outline of the argument(s) the candidate will use to address the problem.

- The INTERVIEW will be used to discuss the research project presented by the candidate and its relation to some of the research topics of the PhD curriculum in Security and Law, namely
- Artificial intelligence and law
- Conceptual analysis of security
- Cybersecurity and cybercrime
- Cybersecurity and law
- Data retention and search engines
- Digital Identity
- E-democracy, cybersecurity and fundamental rights in the cyberspace
- E-government, sustainability and digital transition of the citizenship
- Rule of law and algorithmic administration
- Algorithms in public decision-making
- New technologies and digitalization in cultural heritage, civil protection, and public contracts
- Smart city public regulation and governance, also with regard to climate change
- Virtual reality and metaverse as drivers of change in the workplace
- Algorithmic discrimination in the labour market
- The Private International Law of Secured Transactions
- Cyber War and Cyber Security in International Law
- Health security
- Human rights in the digital age
- Internet governance
- Machine learning and law
- New technology and labor relations
- Philosophy of privacy and new surveillance society
- Personal data protection
- Privacy and big data
- Smart contracts
- Class actions and other mechanisms of collective enforcement of rights
- The use of new technologies to facilitate access to justice
- Technology induced developments in the philosophy of criminal responsibility and punishment</td></tr>
</table>

Research Themes	Lines of research are focused on the following macro-areas: Conceptual analysis of legal issues connected to security, risk, and vulnerability in public or private law Doctrinal analysis of legal issues connected to security, risk and vulnerability in public or private law Economic analysis of legal issues connected to security, risk, or vulnerability in public or private law
Information on references	- Coordinator of the PhD Programme Prof. Alessandro Armando DIBRIS, Via Dodecaneso 35, Genova (+39) 3281003201 alessandro.armando@unige.it - Coordinator of the curriculum Prof. Giorgio Afferni DIGI, Via Balbi 22, Genova (+39) 3356063568 giorgio.afferni@unige.it - Administrative contact of the curriculum Dott.ssa M. Stefania Lavezzo Via Balbi 22, Genova (+39) 0102095436, int. 55436 maria.Stefania.Lavezzo@unige.it
Foreign Languages	Spanish

Course: SECURITY, RISK AND VULNERABILITY
Doctoral Course in agreement with the Bruno Kessler Foundation (Fondazione Bruno Kessler – FBK) and CIMA Foundation

Curriculum: MANAGEMENT AND SECURITY (CODE 10186) [1]

Course Coordinator: Armando Alessandro	
Centro Strategico Interdipartimentale su Sicurezza, Rischio e Vulnerabilità	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant funded by Università degli Studi di Genova, the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00.	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	"Qualifications" mean useful information to appreciate the application, starting from the *Curriculum Vitae et Studiorum*, the research project and any further element. The application form and its attachment have to be written in English. Documents must be sent in electronic form.
Exam Syllabus	The interview consists in a discussion on the *Curriculum Vitae et Studiorum* and qualifications/publications and an in depth presentation of the candidate's research project. The interview is also aimed at verifying that the candidate has adequate knowledge to deal with studies in the chosen curriculum.
Research Themes	The research lines characterizing the curriculum follow the indications available in the website https://sicurezza.unige.net/curricula/ms
Information on references	Candidates must choose at least one and no more than three referees to support their candidature. The referees must be university professors or experts in the subject. If the referee is not a university professor, he/she must also send his/her Curriculum Vitae and a list of publications. The reference letter must be send by the referees, within the deadline of the public notice, to the responsible of the curriculum (teresina.torre@economia.unige.it), object: reference letter –Name –phd. The name, status and current position of the referees chosen by the candidate must be stated in the application. Reference letters that are not presented as requested will not be taken into consideration.
Foreign Languages	English
Further Information	Coordinator of the PhD Programme Prof. Alessandro Armando DIBRIS, Via Dodecaneso 35, Genova (+39) 3281003201 alessandro.armando@unige.it Responsible of the Curriculum Prof.ssa Teresina Torre DIEC, Via Vivaldi 5. Genova (+39) teresina.torre@economia.unige.it

[1] Curriculum added following the note of the curriculum representative professor dated 20.11.2023

Course: SECURITY, RISK AND VULNERABILITY
Doctoral Course in agreement with the Bruno Kessler Foundation (Fondazione Bruno Kessler – FBK) and CIMA Research Foundation (Fondazione CIMA)

Curriculum: RISK, CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT (CODE 10175)

Course Coordinator: Armando Alessandro	
Centro Strategico Interdipartimentale su Sicurezza, Rischio e Vulnerabilità	
Places: 2 – **Grants**: 2 (°)	
(*) 1 grant funded in the context of Agenzia per la Coesione territoriale, under condition to the approval the project. The annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00; (*) 1 grant funded by Department (DIBRIS) in the framework of the project "KORE – Archaeology of dwelling: material evidence and seasonality of homing practices between settlements, spaces and resources in European uplands (16th-21st c. AD)" (FARE 2022 - CUP n. D33C21000240001). The gross annual amount of the scholarship is € 16.500 including social security contributions charged to the scholarship recipient.	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	The research project (10 pages max) must include the candidate's research interests and motivations, a short abstract, the State of the Art and relevant references and the aims of the research activity. The application (curriculum) must contain Transcripts of Records, stating the courses attended and marks obtained throughout the candidate's university career (Bachelor and M.Sc. Degrees). Undergraduate candidates at the deadline of the public notice may submit further documentation, which they deem appropriate, in order to document their university career.
Exam Syllabus	The interview will be a detailed scientific discussion on the candidate's research project (10 pages max), Curriculum Vitae et Studiorum (10 pages max) and qualifications/publications (10 pages max). The interview is also aimed at verifying that the candidate has adequate knowledge to deal with studies in the chosen curriculum.
Research Themes	Research lines: - Identification, analysis, and mitigation of hydrogeological instability processes for the conservation and enhancement of the cultural and landscape heritage of the upper Arroscia valley. - The sustainability in the past: rural archaeology for the study of the practices of social occupation of the space and their seasonality inside and outside settlements Further information and guidelines for the writing the research projects are available at https://sicurezza.unige.net/admission/how-to-apply/themes-rccsd-xxxix-october-2023 The candidate must develop the research project of a maximum of 10 pages required starting from those proposed. Other research topics other than these are not allowed.
Information on references	Candidates must choose at least one and no more than three referees to support their candidature. The referees must be university professors or experts in the subject. If the referee is not a university professor, he/she must also send the Curriculum Vitae and a list of publications. The reference letter must be send by the referees, within the deadline of the public notice, to the Coordinator of the curriculum to the following e-mail address: RCCSD@cimafoundation.org The name, status and current position of the referees chosen by the candidate must be stated in the application. Reference letters that are not presented as requested will not be taken into consideration.
Foreign Languages	English
Further Information	Curriculum Coordinator Prof. Prof. Luca Ferraris DIBRIS, Campus Universitario, Savona luca.ferraris@unige.it For the doctoral fellowship funded under the KORE Project on the topics of rural archaeology. Prof.ssa Anna Maria Stagno anna.stagno@unige.it

Course: HISTORY, ART HISTORY AND ARCHEOLOGY

Curriculum: ART HISTORY (CODE 10176)

Course Coordinator: Valenti Paola	
Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST)	
Places: 2 (°) – **Grants**: 0	
(°) 2 places reserved for employees of ETT Spa	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	Curriculum vitae, qualifications, Master Thesis, publications and Research Project must be included in pdf format, as attachments to the application. Only the qualifications and publications relating to the LAST 3 SOLAR YEARS prior to the calendar year of publication of the call (excluding the Master's degree, which will be assessed even if previous) will be assessed. Qualifications and publications must be congruent with the research themes of the PhD Programme. Qualifications include: 1) Master's Degree (*Laurea Magistrale* or *quadriennale (vecchio ordinamento)* or an equivalent degree; 2) Copy of the MA dissertation (plus an abstract of 10.000 characters); 3) Scientific Publications, consistent with the research themes of the PhD programme: - books; - articles in scientific journals (Class A or B in the ANVUR classification); - essays in collective volumes; - brief essays, critical notes, editorships; 4) Other qualifications: Advanced Training Courses Degrees (*corsi di perfezionamento e/o di specializzazione e/o di Alta Formazione*); Masters in disciplines related to the research themes of the PhD Programme; PhD title; Additional Master's degree in disciplines related to the research themes of the Phd Programme; Grants, Fellowships, Awards; Research activity in scientific institutions; Teaching activity in academic institutions; Study experiences abroad; Internships, Traineeships and professional experiences related to the research themes of the PhD programme; Title of *cultore della materia* or member of examination committees in academic institutions.
Exam Syllabus	The comparative assessment will be based on the evaluation of the candidate's qualifications, the research project and the interview designed to assess the skills and knowledge required for admission to the PhD programme. The interview will evaluate in particular: • Argumentative and analytical skills with regard to the presentation of the research project; knowledge of the state-of-the-art and historiographic context related to the research project; • Foreign language proficiency
Research Themes	The research topics for the two positions reserved for employees of ETT Spa (°) are as follows: - *Virtual reality and 3D reconstruction as simulation tools for restoration work* - *The potential of digital technology for the conservation, cataloguing and valorisation of cultural heritage.*
Information on references	Letters of refence are not required and, if eventually received, will not be taken into account for the evaluation.
Foreign Languages	The interview will test the candidate's knowledge of one of these languages: English, French, German or Spanish The candidate can choose one of these languages for the interview: Italian, English, French, German or Spanish.

Further Information	For further information of this curriculum, send an email to: paola.valenti@unige.it

Course: HISTORY, ART HISTORY AND ARCHEOLOGY

Curriculum: ARCHEOLOGY (CODE 10177)

Course Coordinator: Valenti Paola	
Department of Classical Studies, Philosophy and History (Dipartimento di Antichità, Filosofia e Storia – DAFIST)	
Places: 1 (°) – **Grants**: 0	
(°) 1 place reserved for scholarship holders of foreign countries	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	Curriculum vitae, qualifications, Master Thesis, publications and Research Project must be included in pdf format, as attachments to the application. Only the qualifications and publications relating to the LAST 3 SOLAR YEARS prior to the calendar year of publication of the call (excluding the Master's degree, which will be assessed even if previous) will be assessed. Qualifications and publications must be congruent with the research themes of the PhD Programme. Qualifications include: 1) Master's Degree (*Laurea Magistrale* or *quadriennale (vecchio ordinamento)* or an equivalent degree; 2) Copy of the MA dissertation (plus an abstract of 10.000 characters); 3) Scientific Publications, consistent with the research themes of the PhD programme: - books; - articles in scientific journals (Class A or B in the ANVUR classification); - essays in collective volumes; - brief essays, critical notes, editorships; 4) Other qualifications: Advanced Training Courses Degrees (*corsi di perfezionamento e/o di specializzazione e/o di Alta Formazione*); Masters in disciplines related to the research themes of the PhD Programme; PhD title; Additional Master's degree in disciplines related to the research themes of the Phd Programme; Grants, Fellowships, Awards; Research activity in scientific institutions; Teaching activity in academic institutions; Study experiences abroad; Internships, Traineeships and professional experiences related to the research themes of the PhD programme; Title of *cultore della materia* or member of examination committees in academic institutions.
Exam Syllabus	The comparative assessment will be based on the evaluation of the candidate's qualifications, the research project and the interview designed to assess the skills and knowledge required for admission to the PhD programme. The interview will evaluate in particular: • Argumentative and analytical skills with regard to the presentation of the research project; knowledge of the state-of-the-art and historiographic context related to the research project; • Foreign language proficiency
Research Themes	Interactions between Qin culture and other cultures
Information on references	Letters of refence are not required and, if eventually received, will not be taken into account for the evaluation.
Foreign Languages	The interview will test the candidate's knowledge of one of these languages: English, French, German or Spanish The candidate can choose one of these languages for the interview: Italian, English, French, German or Spanish.
Further Information	For further information on this curriculum, send an email to: fabio.negrino@unige.it

Course: STRATEGIC ENGINEERING AND DECISION METHODS
(CODICE 10178)

Course Coordinator: Sciomachen Anna Franca	
Department of Economics (Dipartimento di Economia – DIEC)	
Places: 1 – **Grants**: 1 (*)	
(*) 1 grant funded by Ascom Servizi Srl Unip (IM), the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.500,00	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND INTERVIEW
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	In the presentation of the curriculum vitae, it is important to highlight, as the following aspects will be used as evaluative parameters: publications (e.g., International Journals, International Conferences, Book Chapters), Master's Degree grade (or equivalent title), work experience and skills acquired. A research project proposal (other than the Master's thesis) must be attached and will be an integral part of the candidate's evaluation. In the research project it is important to highlight, as the following aspects will be used as evaluation parameters: Relevance to the research topics that appear in the call for papers, Originality, Method of execution, Feasibility, Clarity of exposition. The presentation of the research project, which should not exceed 5 pages, should identify the logical and methodological approach, research objectives and a preliminary state of the art.
Exam Syllabus	The interview will aim to verify the candidate's competence in relation to the listed research topics and the methodological ability to deal with research problems. In addition, the interview will also focus on the themes of the research project, inherent to the listed research themes, presented by the candidate.
Research Themes	The competences related to SEDEM encompass all those disciplines that can support decision makers and combine the rationality of quantitative methods with the qualitative understanding of decision making. The aptitude and interest in quantitative sciences applied to the use and development of algorithms and models, including artificial intelligence, useful for preparing decision support systems will therefore be tested. The skills required of students are therefore transversal and interdisciplinary since the fields of application of decision-making methods are many. Among these, of greatest interest for the PhD in SEDEM are: logistics and transport, management referring to different business contexts, green transition, safety and security, and public administration. Specifically, for the grant financed by Ascom Servizi Srl Unip, the research project will have to investigate issues relating to the planning and management of activities for business services. In particular, it is requested to develop research in the field of business economics, with an in-depth study of the main management and managerial areas, i.e.: budgeting and accounting principles, planning/programming and control, strategy, organisation, corporate finance, private and labour law. For more detailed information see the following web address: https://sedem.phd.unige.it/
Information on references	Candidates must choose not less than one and not more than three referees to support their candidature. The referees must be university professors or experts in the subject and it will be their concern to send reference letters, within the deadline of the public notice, to the Coordinator of the Doctoral Course at the following addresses: sciomach@economia.unige.it. The name, status and service place of the referees chosen by the candidates must be stated in their applications. The candidates' aptitude for scientific research must emerge from the contents of the reference letters.
Foreign Languages	English
Further Information	• More detailed information can be found at: https://sedem.phd.unige.it/ • For further information, please contact the coordinator at the following e-mail address: sciomach@economia.unige.it

Course: EUROPEAN STUDIES – Italian national doctorate

Dottorato di "interesse nazionale" in convenzione con Università degli Studi di BOLOGNA, Università degli Studi "G. d'Annunzio" CHIETI-PESCARA, UKE - Università Kore di ENNA, Università degli Studi di FOGGIA, Università degli Studi INSUBRIA Varese-Como, Università degli Studi di MESSINA, Università degli Studi di MILANO, Università degli Studi del MOLISE, Università degli Studi di PALERMO, Università per Stranieri di PERUGIA, Sapienza Università di ROMA, Università degli Studi di ROMA "Tor Vergata", Università degli Studi di SIENA, Università per Stranieri di SIENA, Università degli Studi di TORINO, Università degli Studi di UDINE, Università degli Studi di PERUGIA, Università degli Studi di TORINO, Università degli Studi di UDINE, Università degli Studi di Napoli Federico II

Curriculum: EUROPEAN ECONOMIC AND SOCIAL POLICIES (CODE 10179)

Course Coordinator: Guasconi Maria Eleonora	
Scienze politiche e internazionali (DiSPI)	
Places: 2 – **Grants**: 2 (*)	
(*) 1 grant funded within **PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f)** in collaboration and with the contribution of **FINPRO Liguria**; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243. Research project: Project to re-evaluate mutual aid societies as social and health care units, emerging problems and needs in the area (*) 1 grant funded within **PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f)** in collaboration and with the contribution of **CNA Servizi**; the annual gross amount of the grant, including social security expenses to be paid by the recipient, is € 16.243. Research project: New business needs in the European context between digitalization, artificial intelligence and female entrepreneurship.	
Comparative assessment procedure	QUALIFICATIONS/PUBLICATIONS AND EXAM • Assessment of qualifications/publications and the curriculum vitae et studiorum • Written test (research project) • Interview that includes the description of the candidate's research area of interest, also on the basis of previous activities stated in his/her scientific professional curriculum
Interview	Date, hour and how the interview will be carried out will be posted within the deadline of the notice of competition on the web page https://unige.it/usg/it/dottorati-di-ricerca
Further information on how to present qualifications/publications	With the application, applicants must enclose their curriculum vitae, duly signed, showing their qualifications, any publications deemed useful for the evaluation, and a research project consistent with the Research Topics of the chosen PhD curriculum. The research project should indicate objectives, method and expected results of the research, as well as brief bibliographical indications, and should not exceed 15,000 characters (excluding spaces). Foreign candidates are requested to have a certified knowledge of Italian language level B2.
Exam Syllabus	The interview will focus on the research project and publications submitted by the applicant and the research topics of the applicant's chosen curriculum. Foreign language proficiency will be ascertained at the end of the interview.
Research Themes	Research project for grant within PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f): - Project to re-evaluate mutual aid societies as social and health care units, emerging problems and needs in the area; - Strategic foresight, organization and process optimization in a business services company from a transnational perspective between Italy and France; - New business needs in the European context between digitalization, artificial intelligence and female entrepreneurship.
Information on references	Letters of reference are not required. Their submission, if any, will not be considered by the evaluation committee.
Foreign Languages	English
Further Information	Further information about commitments and conditions of the grants funded within **PROGRAMMA REGIONALE FONDO SOCIALE EUROPEO+ 2021-2027 PRIORITÀ 2 - ISTRUZIONE E FORMAZIONE - ESO 4.6 (OS-f)** are available in the Notice of competition (article 6, paragraph 6) Months to be spent abroad: 0