### GENERAL INFORMATION

**DURATION AND ORGANIZATION OF THE COURSE**

The course starts officially on 1 of November 2018 and lasts three years. At the end of each year, doctoral students shall present the Teaching Body with a detailed written account of the activities carried out. The Teaching Body may ask for the account to be discussed according to procedures it has established.

**Coordinator of the course:** Prof. Giovanni Adorni;  
**E-mail address:** adorni@unige.it  
**Department coordinating for research:** Department of Modern Languages and Cultures (Dipartimento di Lingue e culture moderne – DLCM)

### TRAINING PROJECT

The following 3 projects/scholarships are activated:

**Curriculum LANGUAGES, CULTURES AND DIGITAL TECHNOLOGIES (CODICE 7288):**

**Project/scholarship No. 1:** Multimedia and multilingual Storytelling on the footsteps of land and sea travelers: multisensory and immersive paths for the rediscovery of ancient maritime jobs

**Months abroad:** 4

**In cooperation with:**  
- Liguria Digitale S.p.A.  
- ETT Spa  
- Distretto Ligure delle Tecnologie Marine (DLTM)

**Project/scholarship details:**

The goal of the project to allow a suitable PhD candidate to gain cross- and multi-disciplinary skills and abilities in a range of fields such as the information technology for the new media, the artistic and cultural heritage of typical Mediterranean maritime jobs and, in particular, the Ligurian coast, and two foreign culture and language skills. The would-be professional will know how to build useful software and/or other multimedia interface for two main goals/audiences: first, to enhance and impact on tourism and second to encourage and stimulate citizens to discover and learn more about the
historical and cultural heritage of their own town. This project aims to play consistently within the intangible Heritage scheme, as stated in the Report on the Cultural Heritage presented in Oslo in June 2015 that represents a key contribution to the Europe 2020 strategy and is part of a larger research work for the construction of citizens’ identity within their area of residence / work. The project has two main purposes: The first is to strengthen and expand research on virtual reality (VR), mixed reality (MR) and immersive technologies already present in the Digital Humanities PhD program, together with the development of interactive and multilingual digital storytelling. This being a key idea within the doctorate: to combine the technology and the humanities so that crucial synergies can be built to impact the region (i.e. Liguria) and the cultural tourism associated with all maritime activities and the dissemination of the seafaring traditions. The second purpose is to facilitate the experience of written documents, art and literary works, and any other cultural artifact, through a range of technological aids, through multimedia and multilingual storytelling and the development of physical items that people can use in different areas of contemporary life. The very idea of creating narratives that present 3D reconstructions, 360° images or augmented reality experiences could easily become a useful tool for local museums, providing in-depth paths both for actual visitors and/or for those embarking on virtual tours through various interactive platforms. The potential of new technologies applied to the narrative will allow people to access written documents, the interactive narrative built on them, as well as the historical reconstruction in VR mode. In addition, users could choose their own road ahead inside the object of their interest. The development of design skills in relation to various textual sources, alongside the development of multimedia products making use of the latest and most innovative technology devices will allow the PhD student to meet the needs of an expanding and dynamic market where being specialised must match with having sound knowledge of diverse and complementary areas.

Project/scholarship No. 2: Liguria from the sea to the earth: a virtual and immersive journey, reconstructions of historical and heritage boats and of monumental emergencies, with aerial shots and augmented reality.

Months abroad: 4

In cooperation with:
- Liguria Digitale S.p.A.
- ETT Spa
- Distretto Ligure delle Tecnologie Marine (DLTM)

Project/scholarship details:
The goal of the project is to build a research/professional figure with transversal and multidisciplinary skills aimed at identifying Cultural Heritage “in a state of criticality”, difficult to access or not suitable for communication with traditional means and practices, for which it deserves to use new (knowledge based) tools dissemination so that they are valued rather than lost or forgotten.

Two important goals are configured within the project. The first concerns the strengthening and expansion of the research line on augmented/virtual reality (VR) and immersive technologies of this PhD program, in which the combination of technology and humanities allows the creation of important synergies with strong repercussions on our territory and on tourism. The second is related to the implementation of innovative tools for 3D reconstruction of those Cultural Heritage (architectural, monumental, nautical-marine or environmental) subject to problems.

In the specific case of the heritage of boats (Nautical Heritage), especially if the boats are still in operation, the virtual reconstruction and use is the preferred tool to activate a virtual museum journey (today unpublished) that promotes a cultural growth in relation to the Ligurian maritime tradition. The Nautical Heritage, although part of the cultural heritage in all respects, needs a revival on a large scale, a need now widely felt by the scientific
community and which finds in recent cultural policies fertile ground for future development.

The difficulty that museums, organizations and associations encounter in spreading a heritage that is difficult to "museabilize" because of its intrinsic characteristics (dimensions, reachability if navigating, conditions, etc.) can be easily solved thanks to 3D reconstructions, 360° images or augmented reality. These techniques will be the starting point for the design of multidimensional mixed / hyper reality platforms that also become the container for all additional multimedia content that can be connected to sites and artefacts with respect to new virtual spaces, usable by the digital museum experience. The immersive use of such artifacts can be organized at spatial and/or temporal level: the same artifact model can be visited in the form of an interactive installation, or accessible remotely via the web, or georeferenced through Apps, and also in mobile mode, and at the same time available in VR. Central to the project will be the use of metadata to allow the incremental and multilevel increase of information regarding cultural and environmental heritage, the creation of customized virtual routes and diversified reconstructions (based on metadata) for specific research or fruition goals.

Curriculum THE ARTS, PERFORMING ARTS AND MULTIMEDIA TECHNOLOGIES (CODICE 7289):

Progetto/borsa 3: Le passeggiate a mare: realtà immersive multisensoriali per la fruizione e la ricostruzione virtuale di elementi artistici, architettonici e ambientali del vicino e del lontano passato.

Months abroad: 4

In cooperation with:
- Liguria Digitale S.p.A.
- ETT Spa
- Distretto Ligure delle Tecnologie Marine (DLTM)

Project/scholarship details:
This project aims to train a highly innovative professional ready to use the cultural and visual contents of the Sea Heritage, that can be found in our libraries, paper and digital collections, and to combine them with new technologies. Augmented reality, virtual reality, videomapping and their further use on social media and simple platforms may allow to contextualize past events in the present, overriding time barriers. The Sea Heritage has already been used and developed on international platforms, such as https://www.seaheritage.com/, that contain ancient maps, and can be enhanced and structured with high level immersive solutions, using graphics, lights, video-graphic, video-motion and reconstructing a lot of ancient and beautiful maps. A professional with these skills will allow an innovative development and employment of the PhD student, different from the traditional academic professionals in the cultural heritage field. The new frontier of virtual exhibitions and immersive reality will allow to build immersive environments on cruise ships, to enhance the cruise trip with VR simulations and videomapping simulations, which can introduce and drive guest aboard, by the tour offices on board. A 3D reconstruction of environments and objects of the visited sea sides will allow to remember stuffs and memories of the past. Recognizing ancient maps, redrawing old sea sides and combining the past with a deteriorated present can be useful to understand our cultural heritage, to make the present time a better place, to suggest good practices of sustainable cultural tourism. We won’t abandon the usual research methodologies, in museums, archives and libraries, which are fundamental to find the contents that have to be brought back to a new life. Many virtual reconstructions of environments and realities of the past are the virtuous model that inspire this research: for example the exhibition of the Ara Pacis and the one about Winckelmann, currently at the Capitoline Museums, that reconstructs old philological restitutions and ancient colors and ambients.
Currently, cruise companies are already tooling up to offer an intern
communication based on led wall, video wall, and control systems such as
Digital signage. These technologies can be adapted to the cultural heritage and
shared between navigation and exhibitions.

**PhD FUNDING**
The annual gross amount of the grant, including social security expenses to be
paid by the recipient, is € 16,500.00.
The amount of the doctoral grant shall be increased by 50% for an overall
period of not more than 18 months, if the graduate student is authorized to by
the teaching body to carry out research abroad
Starting from the first year, each graduate student will have, besides the
grant, a budget for research activities in Italy and abroad which will not be less
than 10% of the grant

**ADMISSION REQUIREMENTS**

**COURSE ADMISSION**
Admission is subject to the passing of the selection tests and is conditioned by the
positive outcome of the medical examinations, where required, that are
carried out in health facilities and aimed at ascertaining the suitability for the
specific task in accordance with D. Lgs. No. 81/08.

**REQUIRED QUALIFICATION**
Degree which has been conferred according to the rules and regulations in force prior to the reform of didactic freedom in universities, or a specialist/II
level degree or an equivalent foreign academic qualification.

**SELECTION PROCESS**

**SELECTION COMMITTEE**
The committees are made up of at least 3 university professors for each
course; they may be integrated by not more than 2 experts, who may also be
foreign nationals, from public and private research institutions and structures.

**ADMISSION TEST VENUE**
Università degli Studi di Genova, Department of Modern Languages and
Cultures (Dipartimento di Lingue e culture moderne – DLCM)

**TYPE OF ADMISSION TEST**
- Comparative assessment of the qualifications/publications.
- Written test (research project).
- The interview consists in the discussion of the written test (research
project) and the description of the candidate's research area of interest,
also on the basis of previous activities stated in his/her scientific-
professional curriculum

The tests are focused on confirming the candidates' aptitude for scientific
research.

**METHODS FOR INVITING THE CANDIDATES AND COMMUNICATING THE OUTCOMES OF THE TESTS**

The **examination schedule** is as follows:
- Evaluation of qualifications, curriculum and written test (research
project): **19.7.2018**
- Interview: **20.7.2018, 11.00 am** at Department of Modern Languages
and Cultures (Dipartimento di Lingue e culture moderne – DLCM), Aula
Koch – floor 5.

Candidates can use video conference mode; and, for identification
purposes, the candidate must show the original document of which he
has deposited a certified copy at the time of application.

The list of those admitted to the interview will be affixed at the Department of
Modern Languages and Cultures (Dipartimento di Lingue e culture moderne –
DLCM).

The **final lists** shall be announced on **10th August 2018**, and will appear
solely on:
- the noticeboard of the relevant research Departments/facilities for the
research courses;
- the noticeboard of the University;
- on the Internet address https://unige.it/usg/it/dottorati-di ricerca

No information whatsoever shall be posted to candidates’ domicile.

| WRITTEN TEST | The research project (10 pages maximum) has to be attached to the online application form, and it must concern one or more research Projects/grants highlighted in the section “TRAINING PROJECT.” The research project will be evaluated as practical test for the selection, together with the evaluation of the qualifications and the scientific-professional curriculum, in order to identify the candidate’s aptitude for scientific research in terms of originality, feasibility, clarity in the definition of objectives, methods and expected results. |
| INTERVIEW | The interview consists in the discussion of the written test (research project) and the description of the candidate’s research area of interest, also on the basis of previous activities stated in his/her scientific-professional curriculum. During the interview, the candidate shall also prove his/her proficiency in the following foreign language: English. Non-Italian candidates will also have to prove knowledge of the Italian language. |
| PERCENTAGE VALUES OF EACH TEST | To each candidate can be assigned a maximum of 150 points, divided as follows:
- comparative assessment of the qualifications/publications: max score 30/30, pass mark 20/30.
- Written test (research project): max score 60/60, pass mark 40/60.
- Interview: max score 60/60, pass mark 40/60.

The final ranking will be drawn up by adding the scores assigned in comparative assessment, written test and interview. Candidates will be selected in compliance with the principles of equal opportunities. |
| ADDITIONAL CRITERIA FOR ADMISSION TO THE COURSE | In the case of equal grades, the evaluation of candidates’ incomes prevails for the assignation of grants, as per D.P.C.M. 9 April 2001. |

**PROJECT CO-FINANCED BY THE EUROPEAN UNION**
Regional Operational Program for Liguria - European Social Fund 2014-2020