



## ANNEX N. 1A

### PHD COURSE IN:

#### **"DIGITAL HUMANITIES"**

**Coordinator of the doctoral course: Prof. Stefano Palermo**

**Duration of the Course: 3 years**

**Total Competitive Places: n. 8**

**Places with fellowship: no. 6**

**Of which DM 117: no. 1**

**Of which DM 118: no. 4**

**Granted institution's own funds: n.1**

**Places without fellowship: n. 2**

### PROJECT DESCRIPTION:

The digital transition taking place today imposes new challenges, making innovation a cross-cutting element and redesigning forms and models of organizing social life in all its aspects. In this sense, digitization enters directly into the models of analysis, research and dissemination of the humanities, essential parts of the new knowledge society. Thus, there is evidence of an increasing integration of technologies into everyday practices, to the point of affecting deep and complex experiences such as learning, knowledge exchange, human relations, and hybrid human-machine relations (among others Castells, 2000; Boccia Artieri 2006:2018; Van Dijck, 2018). Within an increasingly articulated and at the same time accelerated landscape are the studies pertaining to the so-called Digital Humanities, also known under the label of digital computing, which constitute a particularly relevant field of study, born out of the attempt to integrate computational procedures and multimedia systems into the humanities (among others Burdick et al 2012).

The pervasiveness of digital worlds and future prospects for further evolution highlight the centrality of developing professional profiles that can hold the two perspectives together (Lugmyr et al. 2017).

Starting from these premises, the Pegaso Online University, as the lead institution, proposes the present curriculum for an associate doctorate in Digital Humanities, articulated in a single curriculum that considers areas and themes of in-depth study of particular relevance and social impact the following topics:

*Human computing in Artificial Intelligence and machine learning* (knowledge of the development of processes of integration of AI in productive, organizational, communicative and relational processes; strengthening of computing and linguistic skills; project proposals aimed at studying and developing computational linguistic evolutions attentive to the pathways of inclusiveness and respect for diversity, a supporting part of the interventions provided by the PNNR).

*Digital heritage, literature and cultural practices* (study and analysis of cultural practices related to the integration of digital and technologies in the preservation of knowledge, culture, past and present; doctoral students will acquire skills aimed at the digitization, preservation, accessibility and analysis



of archival, museum and cultural heritage).

*Computational creativity. AI in literature, art, and music* (study and development of the contaminations of visual, multimedia, and multimodal arts with new technologies, underlying new forms of cultural and artistic expression; The focus will be on the processes of contamination between creativity and technology and the role of AI in enhancing creativity and in the intersection of different disciplines and media).

This training project aims, through the involvement of multiple universities, to prepare highly specialized scholars and experts capable of combining technical and technological skills with the humanities.

The training project is structured on teachings and laboratory activities useful to provide doctoral students with knowledge of the most advanced models and tools of analysis and research, and discipline-specific insights into the ongoing transformation in the Digital Humanities.

Objectives of the proposed disciplines are:

enhance and strengthen both qualitative and quantitative methodological skills;

acquire professional skills in managing complex, innovative research projects with an international scope;

lay the foundation for knowledge and traceable to the area of linguistics;

know the impacts of the digital transition on the organization of production, work and consumption patterns, particularly in the areas of culture, education, creativity, research;

acquire modeling-technological and methodological skills for automatic language processing;

master document management and archiving techniques, with a special focus on new technologies;

The proposed activities may be further supplemented by doctoral students through participation in seminars/conferences/academic initiatives of various kinds, consistent with the research project they intend to develop during the course. The scheduled activities will also be supplemented by seminar moments defined by the Teachers' Board during the annual planning phase of the activities or during the academic year. There will also be at least one moment of peer-to-peer discussion for sharing both methodological aspects and the evidence gradually collected during the applied research phases.

### **INTENDED EMPLOYMENT AND PROFESSIONAL OUTLETS:**

The PhD in Digital Humanities aims to provide skills useful for further academic advancement and deepening and/or to facilitate entry (or career advancement) in research centers of national or international level, public agencies and administrations, companies or third sector companies active in the sectors of reference of the doctoral path. The PhD in Digital Humanities enables learners to look at a wide range of professional opportunities in different sectors (culture, research, education, creativity, communication), enabling them to apply their skills and knowledge to contribute to the understanding, preservation and promotion of cultural heritage in a digital context. Transversally and more broadly, the doctoral program offers the opportunity for a definitive overcoming of a now untimely juxtaposition between technologies and humanism, posing itself as an integrated and successful perspective in response to the needs and evolving scenarios-both in the social and work spheres-that characterize the contemporary world.

Some possible professional outlets include:

1. Researcher: Students with a PhD in Digital Humanities can pursue careers in research, academic and industrial settings;
2. Digital Technology Expert in Cultural Institutions: Museums, archives, libraries and other cultural



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institutions require experts in Digital Humanities to digitize, preserve and make cultural heritage accessible.

3. Data Analyst: Students with advanced skills in data management and analysis can find opportunities in companies, nongovernmental organizations and public institutions that require data-driven analysis and interpretation.

4. Digital Experience Designer: Digital Humanities experts can work in the design and development of applications, websites, games and digital experiences with a humanities focus.

5. Digital Communication and Strategy Consultant: With a thorough understanding of digital technologies and the humanities, PhDs in Digital Humanities can work as consultants to help organizations develop and implement effective communication and marketing strategies that build on cultural and humanities content.

6. Developer of digital environments for interaction: the pathway provides PhDs with the opportunity to structure skills related to the development of intelligent systems for human-computer interaction, with a focus on the more humanistic dimension.

7. Expert in cultural and digital policy: PhDs in Digital Humanities can find employment in the public sector, contributing to the definition and implementation of cultural and digital policies, promoting digitization and innovation in the humanities and cultural institutions.

8. Professional in Digital Publishing: With a solid knowledge of the humanities and digital technologies, doctoral students can work in the digital publishing sector, contributing to the creation, distribution and promotion of digital content in the literary, artistic and cultural fields.

9. Project manager for digital humanities projects: Digital humanities experts can work as project managers, coordinating and supervising research and development projects in the field of digital technologies applied to the humanities.

10. Expert in Digital Accessibility and Inclusion: With a thorough understanding of the ethical and social issues related to the use of digital technologies, PhDs in Digital Humanities can work to ensure that technological solutions are accessible and inclusive for all users, regardless of their abilities or cultural backgrounds.

### **COHERENCE WITH THE OBJECTIVES OF THE PNRR:**

The Doctorate in Digital Humanities fits within the broader framework of the National Project for Recovery and Resilience (PNRR), promoted by the European Commission as part of a larger program called Next Generation Eu (NGEU) that specifically addresses the responsible and sustainable construction of a future for generations to come.

More specifically, the curricular proposals described are fully in line with Mission 1, Mission 2 and Mission 4 of the NRP insofar as they aim to support-with higher education and research-the digital transition of both the public administration, such as universities and large memory preservation institutions and of the production system, fostering integration with increasingly advanced technologies capable of simplifying communicative (as well as merely productive) processes between individuals and between individuals and technologies, reducing the environmental impact in favor of a reconversion of knowledge preservation and fruition practices.

With respect to the first mission (Mission 1), precisely because of the humanistic vocation of the cross-curricular approach to the study and development of technologies promoted by this doctorate, specific attention of the curricula is given to the dimension of culture, which has been increasingly opened in



recent years to technological contamination, understood as a tool/medium, as a language and at the same time as a context.

In summary, with respect to mission 1, the proposed contribution of the PhD in Digital Humanities is fully consistent with the following points included in the NRP:

- M1C2 - Digitization, innovation and competitiveness in the production system;
- M1C3 - Tourism and Culture 4.0.

The PhD Course is also consistent with Mission 2 of the PNRR, "Green Revolution and Ecological Transition": the implementation of the dual digital and environmental transition fosters processes of repositioning the social, economic and productive systems of the cultural, creative and humanities sectors typical of the new knowledge society.

The fourth mission (Mission 4) presents a close adherence and coherence with the doctoral program's educational proposal, given its full vocation to support projects that aim to strengthen the educational system, strengthen research and foster integration with the productive meshes of our country. Equity and inclusion are transversal themes that are at the heart of the design also in the area of research and innovation that the doctorate intends to support and hope for. More specifically, the close synergy with the industrial fabric, the connection of experimental work with the concrete development of new interfaces, databases, human-machine interaction systems are intended to foster the transition, marked in point 2 (M4C2), from research to enterprise, from the place of innovation and study to the practical place of concrete application with operational spin-offs for users.

Finally, the innovative and educational contribution proposed by the PhD also affects the areas of Mission 5, which aims to facilitate labor market participation, including through training, strengthen active labor policies, and foster social inclusion.

The innovations brought about by the cognitive contribution of doctoral students must take into consideration of the ethical aspects related to inclusiveness and achieving spillovers that will promote the growth and recovery of our country, after the pandemic crisis, by bringing into the system new skills, new professional figures that can consolidate the social fabric and foster innovation.

The topic areas relevant to the writing of the research project within the Doctoral Program in Digital humanities are as follows:

<b>Subject Area _DH</b>	<b>Digital humanities: digital, interactive and immersive humanities and technologies</b>	<b>Places with fellowship</b>	<b>Places without fellowship</b>



<p><b>Brief description of educational and research activity</b></p>	<p>The objective of the PhD is to contribute to the dissemination of knowledge and the advancement of scientific research on the methodologies, areas of development and interactions with the context of digital humanities, understood as the intersection between the humanities and new technologies. The digital transition taking place today is part of the new models of analysis, research and application of the humanities, essential elements of the new knowledge society. Therefore, the Ph.D. aims to provide advanced methodological and research skills in the following areas: AI and Machine learning applied to human-computer interactions; digitization and valorization of culture, knowledge and therefore linguistic, literary, historical and economic sources; integration between technologies and new forms of expression of art and creativity.</p>	<p><b>6</b></p>	<p><b>2</b></p>
<p><b>Research activities to be carried out at company/research center</b></p>	<p>Optional research or educational activities to be agreed with the mentor based on the specific project proposed by the doctoral student.</p>		
<p><b>Length of stay in the company/research center research/doctoral student (min 6 - max 12)</b></p>	<p>6/12 months optional</p>		
<p><b>Research activities to be carried out abroad or at institutions</b></p>	<p>Optional research or educational activities to be agreed with the mentor based on the specific project proposed by the doctoral student.</p>		
<p><b>Length of stay (min 6 - max 12 months within the three-year period, including non continuous)</b></p>	<p>6/12 months optional</p>		
<p><b>Name of host institution</b></p>	<p>International research institutes/institutions that have entered into or will enter into the agreement with the PhD course in Digital Humanities.</p>		