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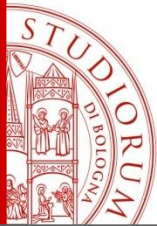
DIGITAL HUMANITIES AND DIGITAL KNOWLEDGE (DHDK)

International second cycle degree/Master

<http://corsi.unibo.it/2Cycle/DigitalHumanitiesDigitalKnowledge>

Department of Classical Philology and Italian Studies (FICLIT) in
collaboration with the Department of Computer Science and
Engineering (DISI)

School of Arts, Humanities and Cultural Heritage,
University of Bologna



Brief presentation

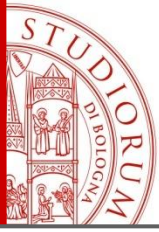
The international second cycle degree programme in Digital Humanities and Digital Knowledge offers a **cross-disciplinary curriculum** designed to foster close connections between humanities and the sciences of modeling, representation and processing of information and knowledge.

The programme is delivered in English and targets those who wish to explore the field of literary, linguistic, historical, and cultural studies and the arts by using models, systems, and computational methods to **represent and process data, information and knowledge**.

At the end of the programme students will be able to manage the **whole cycle of design and planning of heterogeneous and complex digital cultural objects**: from the concept to the theories and methodologies to manipulate them, and to their deployment to end users.



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Objectives

The degree aims to offer a curriculum that spans a **variety of subjects** in the digital humanities domain, aiming to **hybridize and integrate** skills and know-hows with an inter- and multi- disciplinary approach.



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This generates competences and expertise in:

- **Digital management** and enhancement of cultural documents...
- Creation of **multimedia resources** in galleries, libraries, archives and museums domain...
- Design of **complex information systems**...
- Data and content **analytics** in the humanities...
- Valorisation of the entire **life cycle** of cultural objects...

... with a renewed ability to think about the role and purpose of the humanities given the cultural framework provided by the digital technologies.

In detail

It is essential for the student to acquire the principles behind the:

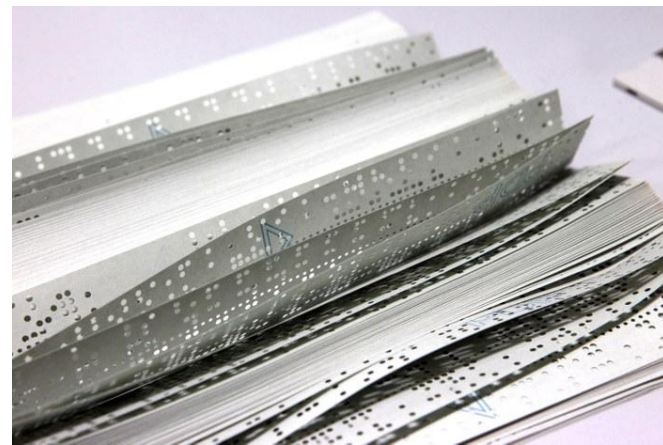
- **modeling, processing and representation of information and knowledge**, in order to conceive and create **complex digital objects**.

These principles must also be accompanied by the:

- reinforcement of the **humanistic approach to data**, both on a **literary/philological and linguistic level** and on the **historical/cultural level** in its wider sense.

These competences must be associated to the know-how required to supervise an entire project plan:

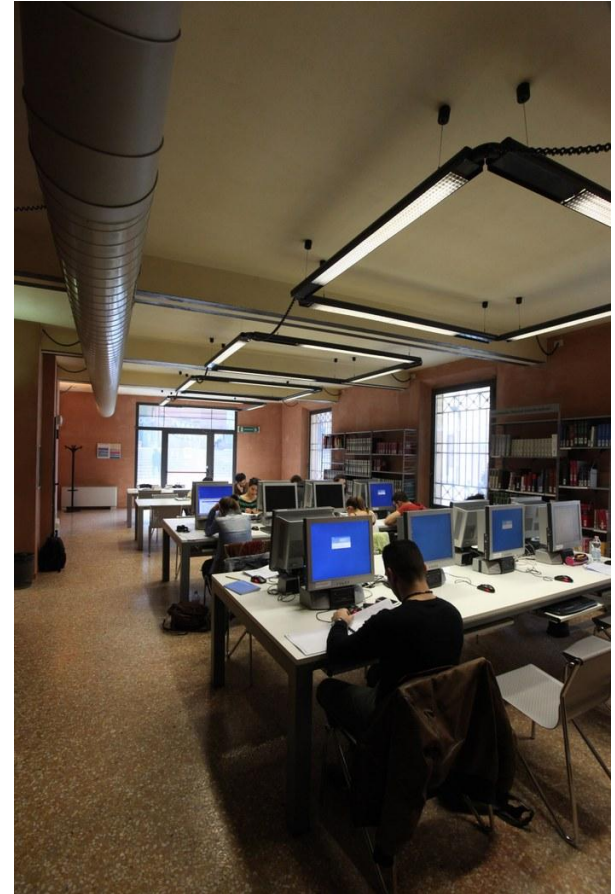
- the **legal aspects** linked to the digital document
- the **economic aspects** due to marketing and business needs
- the **communication aspects** and in particular those in the social media context.



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Macro areas of learning

1. ***computer science and engineering*** (computational thinking; database design; web technologies; usability analysis, design and evaluation; representation and extraction of knowledge; multimedia applications);
2. ***literary, linguistic, historical/cultural and related to the arts in the digital context*** (digital texts and data; digital cultural heritage; digital editing; text retrieval, analysis and mining);
3. ***complementary: economics, law and communication*** (digital marketing; business strategy; entrepreneurship; social media; digital communication and writing; Web analytics; digital copyright; open access).



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Career opportunities

- **Expert in design, production and valorisation of Web resources**

The graduate is capable of creating, managing and promoting Web projects and environments, but also of designing accessible and user-friendly interfaces. The graduate is also able to handle the knowledge conveyed by all the documentation of an information system.

- **Expert in the digital management of cultural resources**

The graduate masters the life cycle of digital cultural resources: from the design of a project plan to its realization, from the dissemination of a collection to its preservation. The graduate is familiar with the techniques for analysing and extracting information from datasets and corpora.



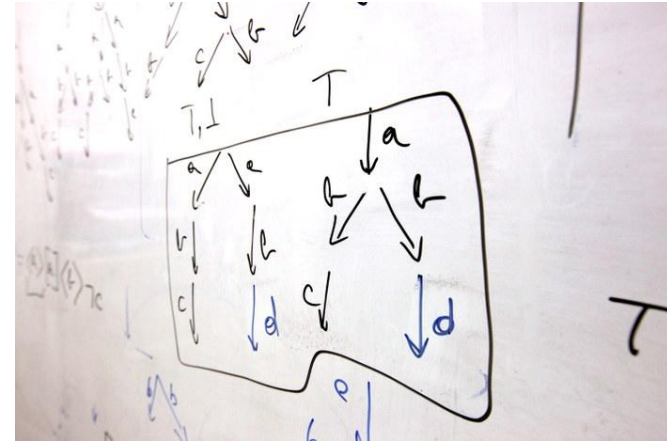
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Professional figures in a name



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- Data curator
- Data scientist
- Digital library specialist
- Digital publishing expert
- Knowledge engineer
- Knowledge organizer
- Metadata specialist
- Multimedia object specialist
- Open data expert
- Social media expert
- User Experience Designer
- Web analyst
- Web content specialist
- Web information architect
- Web project manager



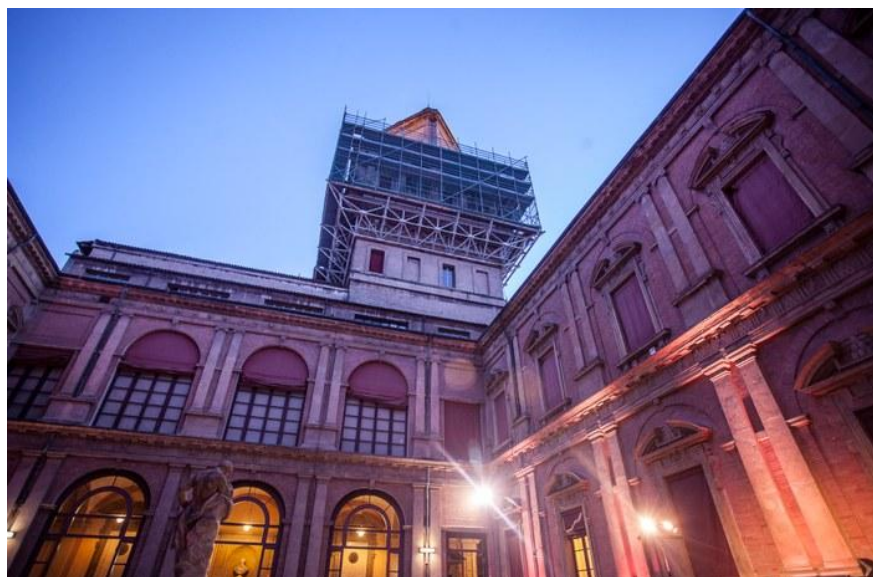
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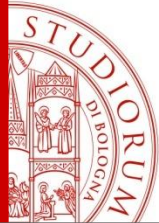
Partnership

In order to guarantee internships and to create a deep connection with stakeholders, the degree is defining conventions with agencies, institutions and companies in the following fields:



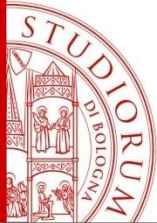
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- International and local traditional and digital publishers
- Web and social media agencies
- Archives, Libraries and Museums
- Tools development and project management agencies
- Digital environments services and companies
- National and International Associations of DH



Eligibility for admission (1)

- ❖ Applicants must hold a **first-cycle degree** (or an equivalent degree achieved in another educational system) in one of the following classes:
 - L1 Beni culturali (Cultural Heritage)
 - L3 Discipline delle arti figurative, della musica, dello spettacolo e della moda (Visual Arts, Music, Performing Arts and Fashion Studies)
 - L5 Filosofia (Philosophy)
 - L8 Ingegneria dell'informazione (Information Technology Engineering)
 - L10 Lettere (Humanities)
 - L11 Lingue e culture moderne (Modern Languages and Civilisation)
 - L15 Scienze del turismo (Tourism)
 - L19 Scienze dell'educazione e della formazione (Education and Training)
 - L20 Scienze della comunicazione (Communication)
 - L31 Scienze e tecnologie informatiche (Computer Science)
 - L42 Storia (History)
 - L43 Tecnologie per la conservazione e il restauro dei beni culturali (Conservation and Restoration of Cultural Heritage)

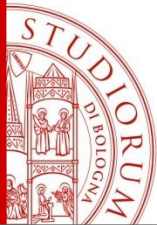


Eligibility for admission (2)

In addition, applicants must have achieved at least **54 ECTS credits** in one or more of the following subject areas (criteria applicable only to students who achieved their degree in the Italian academic system):

- INF/01 INFORMATICA (Computer Science)
- ING-INF/05 SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI (Data Processing Systems)
- IUS/10 DIRITTO AMMINISTRATIVO (Administrative Law)
- IUS/20 FILOSOFIA DEL DIRITTO (Philosophy of Law)
- L-ART/01 STORIA DELL'ARTE MEDIEVALE (History of Medieval Art)
- L-ART/02 STORIA DELL'ARTE MODERNA (History of Modern Art)
- L-ART/03 STORIA DELL'ARTE CONTEMPORANEA (History of Contemporary Art)
- L-ART/06 CINEMA, FOTOGRAFIA E TELEVISIONE (Cinema, Photography and Television)
- L-FIL-LET/10 LETTERATURA ITALIANA (Italian Literature)
- L-FIL-LET/11 LETTERATURA ITALIANA CONTEMPORANEA (Contemporary Italian Literature)
- L-FIL-LET/12 LINGUISTICA ITALIANA (Italian Linguistics)
- L-LIN/01 GLOTTOLOGIA E LINGUISTICA (Glottology and Linguistics)

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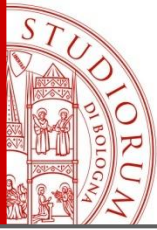


Eligibility for admission (3)

- M-FIL/02 LOGICA E FILOSOFIA DELLA SCIENZA (Logic and Philosophy of Science)
- M-FIL/04 ESTETICA (Aesthetics)
- M-FIL/05 FILOSOFIA E TEORIA DEI LINGUAGGI (Philosophy and Theory of Language)
- M-FIL/06 STORIA DELLA FILOSOFIA (History of Philosophy)
- M-STO/01 STORIA MEDIEVALE (Medieval History)
- M-STO/02 STORIA MODERNA (Modern History)
- M-STO/04 STORIA CONTEMPORANEA (Contemporary History)
- SPS/07 SOCIOLOGIA GENERALE (General Sociology)

18 ECTS credits of which, at least, in:

- INF/01 INFORMATICA (Computer Science)
- ING-INF/05 SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI (Data Processing Systems)
- L-FIL-LET/10 LETTERATURA ITALIANA (Italian Literature)
- L-FIL-LET/11 LETTERATURA ITALIANA CONTEMPORANEA (Contemporary Italian Literature)



Assessment intakes

The Admission Board will evaluate Applications in order to check the expected personal competencies and skills.

Evaluation will be based both on:

- **dossier**

- results of **previous studies** (considering grades obtained and course units attended);
- detailed **CV** in English;
- **certificate of English language proficiency (if held)**: students must have a high intermediate proficiency (B2 Level) according to the Common European Framework of Reference for Languages.

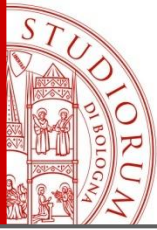
- **interview**: the interview will be held in English and will assess competences and aptitudes in computer science and humanities, including language proficiency.

CALL FOR APPLICATION:

<http://corsi.unibo.it/2Cycle/DigitalHumanitiesDigitalKnowledge/Pages/admission-requirements.aspx>



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Course Structure – First year

Compulsory learning activities

Computer Science and Engineering Area - 30 cfu

- COMPUTATIONAL THINKING AND PROGRAMMING
- DATA MODELLING AND MULTIMEDIA DATABASES
- INFORMATION MODELLING AND WEB TECHNOLOGIES
- KNOWLEDGE REPRESENTATION AND EXTRACTION
- INTANGIBLE ARTEFACTS, CULTURAL HERITAGE AND MULTIMEDIA



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Literary and Linguistic Disciplines Area - 18 cfu

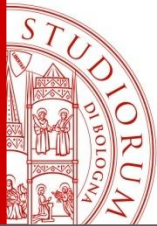
- DIGITAL TEXT IN THE HUMANITIES: THEORIES, METHODOLOGIES AND APPLICATIONS
- SCHOLARLY EDITING AND DIGITAL APPROACHES
- TEXT RETRIEVAL, ANALYSIS AND MINING

Cultural Heritage Area (libraries, archives and museums) - 12 cfu

- KNOWLEDGE ORGANIZATION AND DIGITAL METHODS IN THE CULTURAL HERITAGE DOMAIN
- MUSEOLOGY, MUSEOGRAPHY AND VIRTUAL ENVIRONMENTS



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Course Structure – Second year

Four activities to be chosen among (one for each area)

Law and Digital Methods Area (6 cfu)

- DIGITAL COPYRIGHT AND RELATED RIGHTS
- OPEN ACCESS AND DIGITAL ETHICS
- E-DEMOCRACY, E-GOVERNMENT AND E-CITIZENSHIP

Management and Organization Area (6 cfu)

- DIGITAL AND WEB MARKETING
- BUSINESS STRATEGY AND INNOVATION IN CULTURAL INDUSTRIES
- ENTREPRENEURSHIP

Communication and Social Media Area (6 cfu)

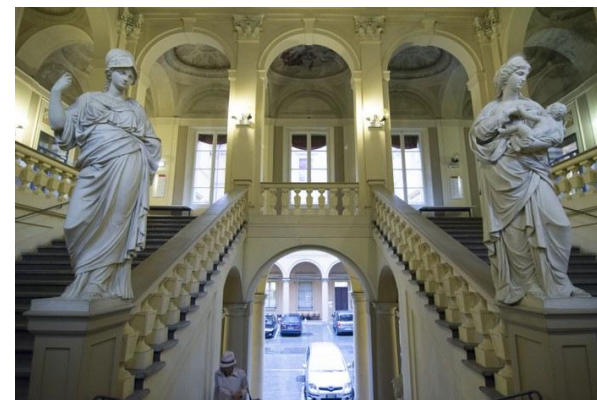
- SOCIAL MEDIA TECHNOLOGIES
- WEB ANALYTICS
- WEB WRITING AND DIGITAL STORYTELLING

Computing and Humanities Area (6 cfu)

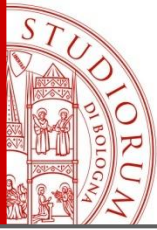
- USABILITY AND USER EXPERIENCE
- LINGUISTICA COMPUTAZIONALE
- DIGITAL HUMANITIES: SOURCES AND METHODS
- MODELS OF TEXTUAL DATA
- SEMANTIC DIGITAL LIBRARIES
- DIGITAL SOCIOLOGY



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Course Structure – Second year

- **One activity to be chosen among (6 cfu)**
 - **INTERNSHIP**
 - **SEMINARS - Some proposals:**

Philosophy and ethic of information; Digital books and digital publishing; Communication and human-computer dialogue; Management in cultural and creativity industries
 - **LABORATORY - Some proposals:**

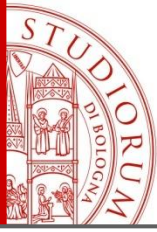
Digital palaeography; Gamification and crowdsourcing; E-Commerce for Cultural Heritage; Project management and business plan

- **ELECTIVES (12 cfu)**

- **One or two activities to be chosen among (18 cfu):**
 - FINAL EXAMINATION (18 cfu)
 - FINAL EXAMINATION (12 cfu) + INTERNSHIP (6 cfu)



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Faculty

The Unibo staff and related academic disciplines:

- **Ilaria Bartolini** (ING-INF/05 Data Processing Systems)
- **Daniele Donati** (IUS/10 Administrative Law)
- **Mirko Degli Esposti** (MAT/07 Mathematical Physics)
- **Simone Ferriani** (SECS-P/08 Corporate Finance)
- **Paola Italia** (L-FIL-LET/10 Italian Literature)
- **Alberto Musso** (IUS/04 Commercial Law)
- **Monica Palmirani** (IUS/20 Philosophy of Law)
- **Marco Roccetti** (INF/01 Computer Science)
- **Carla Salvaterra** (L-ANT/03 Roman History)
- **Marco Santoro** (SPS/07 General Sociology)
- **Fabio Tamburini** (L-LIN/01 Glottology and Linguistics)
- **Francesca Tomasi** (M-STO/08 Library Management)
- **Fabio Vitali** (INF/01 Computer Science)



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

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