

COURSE DETAIL

DIGITAL ARCHAEOLOGY

Country

Italy

Host Institution

University of Bologna

Program(s)

University of Bologna

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Archaeology

UCEAP Course Number

172

UCEAP Course Suffix**UCEAP Official Title**

DIGITAL ARCHAEOLOGY

UCEAP Transcript Title

DIGITAL ARCHAEOLOGY

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course is part of the Laurea Magistrale degree program and is intended for advanced level students. Enrollment is by permission of the instructor. This course focuses on the new digital techniques to investigate, document, analyze, and publicize monuments, sites, and archaeological landscapes. Students learn how to use GIS and Web-GIS systems, integrating information sources and mapping techniques. They will appreciate the value of the systematization and computerized management of archaeological data, databases, and interpreted restitution. They study the potential of digital applications for archaeological research, toward a three-dimensional documentation of contexts, serving also for dissemination purposes and public use. Students use digital techniques and tools appropriately in archaeology and are able to choose the most correct approach in relation to the case study or archaeological goal. The course discusses relevant aspects of digital archaeology, i.e., archaeological research conducted through methodologies and technologies derived from the digital revolution, with a critical perspective entrusted from time to time to the analysis of the most up-to-date scientific work.

In the first part of the course, the main basic elements of digital archaeology are discussed:

- Data in Archaeology: the archaeological record.
- Dealing with attribute data: the Database.
- Spatial data acquisition: survey in archaeology.
- Digital maps and the concept of scale.
- GIS

In the second part, some of the areas in which the elements discussed in the first part make a decisive contribution to the creation of new knowledge are presented through case studies based on the most recent scientific literature or currently ongoing projects:

- GIS between the Landscape and the Intra-site level
- GIS and Legacy Data Management
- 2D, 2.5D, 3D, 4D: the many dimensions of digital data

- Digital publication: WebGIS, multimedia publications of large excavation contexts
- Open Data, Big Data, FAIR Data
- Virtual Reality, immersive archaeology, gamification
- Reflexive archaeology

Language(s) of Instruction

English

Host Institution Course Number

93154

Host Institution Course Title

DIGITAL ARCHAEOLOGY (LM)

Host Institution Course Details

<https://www.unibo.it/en/study/course-units-transferable-skills-moocs/course-uni...>

Host Institution Campus

BOLOGNA

Host Institution Faculty**Host Institution Degree**

LM in ARCHAEOLOGY AND CULTURES OF THE ANCIENT WORLD

Host Institution Department

HISTORY AND CULTURES

Course Last Reviewed

2025-2026

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