

DIGITAL HERITAGE (LM85)

(Università degli Studi)

Teaching MOBILE APPLICATIONS DEVELOPMENT

GenCod A004199

Owner professor MARCO LUCIO SARCINELLA

Teaching in italian MOBILE APPLICATIONS DEVELOPMENT

Teaching MOBILE APPLICATIONS DEVELOPMENT

SSD code ING-INF/05

Reference course DIGITAL HERITAGE

Course type Laurea Magistrale

Credits 6.0

Teaching hours Front activity hours: 30.0

For enrolled in 2025/2026

Taught in 2025/2026

Course year 1

Language ENGLISH

Curriculum PERCORSO COMUNE

Location

Semester Second Semester

Exam type Oral

Assessment Final grade

[Open Course timetable](#)

BRIEF COURSE DESCRIPTION

The course introduces the main techniques and technologies for the design and development of mobile applications. It covers both user experience (UX) design and graphical user interfaces, as well as the distributed architecture of mobile applications and communication between software components. From a technological perspective, the course provides an overview of current solutions for cross-platform mobile application development.

REQUIREMENTS

- Fundamentals of web technologies, including HTTP and client-server architectures
- Ability to read and interpret diagrams using the Unified Modeling Language (UML)
- Familiarity with version control systems, particularly Git, and the use of repositories (e.g., GitHub or GitLab)

COURSE AIMS

The course provides foundational knowledge of the methodological principles and technologies underlying the design and development of mobile applications in the cultural heritage domain, with particular attention to mobile user experience.

Students will be able to apply this knowledge through project-based activities and prototype development, gaining practical skills in building mobile applications for cultural contexts.

They will develop independent critical judgment by comparing platforms and technologies and evaluating solutions based on effectiveness, accessibility, and technical sustainability.

Communication skills will be strengthened through the analysis and presentation of cultural case studies, enabling the use of appropriate technical language and collaboration in interdisciplinary teams.

Learning skills will be fostered through practical exercises, laboratory activities, and real-world case analysis, encouraging students to independently explore emerging mobile technologies using technical documentation and online resources.

TEACHING METHODOLOGY

The course combines theoretical lectures with hands-on laboratory activities, including collaborative design exercises and the analysis of real-world case studies in the cultural heritage domain.

ASSESSMENT TYPE

The exam consists of a practical project, which may be developed individually or in groups, and is evenly evaluated based on the student's understanding of the course content, ability to document design choices, and clarity and formal accuracy of the presentation.

REFERENCE TEXT BOOKS

Recommended reference texts (not mandatory):

- Sharp, H., Rogers, Y., & Preece, J. (2007). Interaction design: beyond human-computer interaction. Wiley.
- Cooper, A., & Reimann, R. (2003). About Face 2.0. The Essentials of Interaction Design.

Additional teaching materials will be provided by the teacher.