

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Computer Forensic - A-L

2526-1-E1402A005-AL

Learning objectives

A) Knowledge and Understanding

Upon completion of the course, students will be able to:

- Demonstrate knowledge of the main concepts and principles defining the legal context of computer science, both in its legal and technical dimensions, which together constitute the field of legal informatics.
- Understand and explain the key legal notions relevant to new technologies, including data, personal data, privacy, algorithm, and artificial intelligence (AI).
- Identify and analyze the specific features and characteristics of legal content as used in informatic environments.

B) Applied Knowledge and Understanding

Students will be able to:

- Identify, select, and apply appropriate linguistic, logical, and analytical tools for defining, understanding, and interpreting legal concepts within informatic contexts.
- Use, in a conscious and informed manner, the main legal notions and methods applied to new technologies.
- Recognize and manage basic informatic content with legal relevance, such as secure access, electronic signatures, data management, confidentiality, privacy, cybersecurity, and next-generation digital applications.
- Distinguish the specific characteristics of informatic contexts with legal significance in comparison to other normative domains.

C) Making Judgements

Students will be able to:

- Develop independent and critical judgment in applying legal concepts to informatic contexts.
- Exercise autonomy in evaluating and applying legal classifications and reasoning to issues arising from the interaction between law and new technologies.

D) Communication Skills

Students will be able to:

• Communicate theoretical and practical aspects of fundamental legal concepts in the context of informatics clearly, accurately, and appropriately.

- Use the linguistic and analytical tools introduced in the course to discuss both general theoretical issues and specific practical applications of legal informatics.
- Present and explain the main legal implications of informatic phenomena, including those related to the relationship between law and artificial intelligence or law and emerging technologies.

E) Learning Skills

Students will be able to:

- Acquire and consolidate knowledge of the main themes and issues related to legal informatics.
- Understand different legal classifications and the main informatic tools currently available to legal professionals.
- Develop the ability to update and expand their knowledge autonomously in response to the rapid evolution of digital technologies and their legal implications.

Teaching language: Italian.

Contents

The course will focus on the main key concepts of legal informatics, with particular attention to the linguistic dimension. Specific emphasis will be placed on the distinctive features of legal language in relation to informatic and digital contexts.

The course will therefore examine the main legal issues arising within the field of legal informatics. Particular attention will be devoted to fundamental notions relevant to the education of legal professionals in this area, such as the redefinitions—within informatic contexts—of concepts like unlawfulness, sanction, legal obligation, and subjective right, as well as notions such as data, privacy, security, transparency, and digital signature, among others.

Special consideration will also be given to the analysis of how legal professionals operate in relation to new technologies, including issues concerning the responsibilities of human agents with respect to artificial intelligence (AI), which are crucial both for theoretical reflection and for practical applications in legal informatics.

The course will be supplemented by meetings and seminars, for which specific information will be provided during the course.

Teaching language: Italian.

Detailed program

The course will cover, by way of example and without being exhaustive or prescriptive, the main topics of the discipline, including:

Presentation and general framework of the Course in Legal Informatics.

Normative concepts and their informatic contextualization.

Legal informatics as language.

Law in the information society: the characteristics of the information society and the specific role of law.

Data, rules, and rights: conceptual analysis and practical perspectives.

The GDPR (Regulation EU 679/2016).

Data security between past and future: certified electronic mail (PEC) and digital signature.

Artificial intelligence and law: the legal regulation of artificial intelligence.

Legal analysis of Al-related risks: selected ethical approaches to Al.

The EU Artificial Intelligence Act (2024).

Italian legislation on AI: Law No. 132/2025.

Teaching language: Italian.

Prerequisites

Students are expected to have:

Linguistic and cognitive skills acquired during upper secondary education.

Basic legal competences developed during the first semester of the first year of the Legal Studies programme.

Teaching methods

The course will be delivered through a combination of different teaching methods:

8 two-hour lectures delivered in person in a traditional (didactic) format.

5 two-hour lectures delivered in person, combining an initial didactic component with a subsequent interactive phase aimed at actively involving students.

3 two-hour lectures delivered remotely (online) in a didactic format.

Practical exercises form an integral part of the course and are scheduled according to the topics covered. Accordingly, the course will include both lectures and interactive sessions, as well as in-class discussions, practical exercises, and participation in seminars.

The teaching activities will include:

Analysis and study of the main theoretical issues relevant to legal informatics.

Definition and redefinition, within specific applied contexts, of notions, statements, and theoretical-legal issues related to the field of legal informatics.

A critical and argumentative approach, together with guided analysis of theoretical-legal questions currently debated in relation to major information technologies of legal relevance.

Analysis of legal texts and sources, as well as critical examination of legal discourse and reasoning concerning key topics in legal informatics.

Assessment methods

Final Exam: Oral test covering the topics discussed in lectures and exercises, based on the reference texts (manuals, articles, and e-learning materials).

Content Focus: Particular emphasis on law in relation to major contemporary information technologies.

Objectives: Evaluate students' understanding of key topics, ability to explain concepts clearly, and use of appropriate terminology.

Preparation: Examples of typical oral questions will be provided during lectures; class attendance is strongly recommended.

Assessment Criteria: Knowledge and comprehension of fundamental course content; ability to apply knowledge critically and independently; logical and argumentative skills.

Notes: No intermediate exams will be conducted. Students should review all topics indicated by the instructor on the e-learning platform, supplemented by additional materials provided.

Textbooks and Reading Materials

For all students, the exam should be prepared by studying lecture notes and the sections indicated during the course from the following text:

A. C. Amato Mangiameli, G. Saraceni, Cento e una voce di informatica giuridica, Giappichelli, Turin, 2023.

Sustainable Development Goals

QUALITY EDUCATION | GENDER EQUALITY | REDUCED INEQUALITIES | PEACE, JUSTICE AND STRONG INSTITUTIONS | PARTNERSHIPS FOR THE GOALS