

**COURSE DATA****DATA SUBJECT****Code:** 34862**Name:** Legal aspects of ICT**Cycle:** Undergraduate Studies**ECTS Credits:** 6**Academic year:** 2026-27**STUDY (S)**

| Degree | Center | Acad. year | Period |
|---|--------------------------------------|-------------------|---------------|
| 1407 - Degree in Multimedia Engineering | Escola Tècnica Superior d'Enginyeria | 4 | First quarter |

SUBJECT-MATTER

| Degree | Subject-matter | Character |
|---|---|------------------|
| 1407 - Degree in Multimedia Engineering | Aspectos Legales de las TIC y el Sector Audiovisual | COMPULSORY |

COORDINATION

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SUMMARY

This course is presented as a necessary complement to the professional development of future graduates. Alongside technological competencies is essential to have complementary skills that allow a full professional development and exercise of the profession that it conforms to the applicable legal and ethical rules.

Knowledge of the meaning and application of basic concepts of conduct, ethics and legal is an objective need for a professional performance suited to regulatory requirements and rules of conduct to avoid unnecessary risks, that could affect both to the multimedia service provider as to potential customers or users of products and / or applications.



Moreover, the subject provides a comprehensive overview of the actual situation of the labor market and the practical implications raised by the professional associations, by the presence of providers trusted third parties who accredit knowledge and roles, their obligations and rights, that can assume a professional either hired labor or as a service provider.

It also seek to provide sufficient knowledge of all those legal and ethical requirements that is necessary to analyze to design, implement, test and deploy software projects properly.

In regard to the practical part, students acquire the skills necessary to be able to identify these ethical and legal requirements, locate and use available resources, and acquire a vocabulary and skills to be able to develop their work in multidisciplinary teams and to identify where his performance needs to seek services or support from professionals from other disciplines.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

There are no prerequisites for enrollment, but it is recommended to have completed the following areas / subjects:

Company business

Engineering, Society and University. Also, the subject has an instrumental relationship to concepts in the course studied computer programming, software engineering and informatics security



COMPETENCES / LEARNING OUTCOMES

1405 -

G1 - Be able to relate and structure information from different sources and to integrate ideas and knowledge. (RD1393/2007)

I11 - Know the standards and regulations of information technology at Spanish, European and international level.

MM15 - Be able to respond professionally to the requirements at each step of a multimedia production process: show skills for preparing and understanding scripts and communication, graphic design for communication, management of streaming technology, web design and production and post-production processes.

MM16 - Have theoretical and practical knowledge of the technologies applied to audiovisual media (photography, radio, sound, television, video, film and multimedia).

MM28 - Be able to solve problems with initiative, decision-making and creativity and to communicate and transmit the knowledge, abilities and skills of a multimedia engineer.

MM5 - Know how to apply the theoretical and practical resources to deal with a multimedia application as a whole.

MM6 - Conceive, design, and implement projects related to multimedia products by using engineering methodologies, applying the principles of human resources management and applying economic principles.

MM7 - Be able to apply the principles of audiovisual graphic design and communication to multimedia products.

MM8 - Integrate knowledge of different multimedia technologies to create products that offer global solutions that are appropriate to each context.

DESCRIPTION OF CONTENTS

1. Introduction to ethics

Introduction to ethics

- a) Definition of profession and ethics
- b) Engineering and Ethics
- c) Differences between ethics and law
- d) Self-regulation of professional practice
- e) Why the growing importance of ethics today?



The Ethics of Computer Engineering

- a) Potential social problems caused by the use of computers
- b) Computer Crimes
- c) Computer Engineer Ethics: main features and principles

The Profession of Computer Engineering

- a) Definition of profession
- b) The profession of engineer in Spain
- c) Professional associations
- d) The ethics of the profession of Computer Engineering
- e) IT Professional ethics Codes
- f) Professional codes in Computer Engineering
- g) The institutional framework of the computing profession
- h) The need for a computer professional code
- i) The ten commandments of ethics Computer Engineering
- j) Codes of ethics in computing: national and international examples

2. Professional Bodies, Professional Associations and institutions of study and diffusion

Professional Bodies:

- a) Professional Spanish Bodies in Computer Engineering and their General Council
- b) Activities and services COIICV
- c) Codes of conduct for computer Professional Bodies

Professional Associations

- a) Types of associations in Spain and International
- b) Benefits for the professional
- c) Presentation of the most significant, as ATI, ALI and AI2 in Spain, and international as ACM, AEI SECURITY, ISMS, ISACA, etc..
- d) Products and services ISACA
- e) ISACA Code of Ethics

Entities of study and diffusion

- a) Types of entities in Spain and International
- b) Benefits for professionals and society
- c) Presentation of the most significant, as INCIBE, ITGI, IEEE, etc..

3. AENOR standards in the environment of Computer Engineering

Standards AENOR in the IT environment:

- a) Total quality as a competitive strategy applied
- b) What are ISO standards?
- c) Classification of standards adopted in Spain and International



- d) PDCA Cycle
- e) Quality Circles
- f) Outline of the major standards
- g) Work areas of Computer Engineering
- h) Professionals Certificates of Implanter , Auditor and other

4. Labour Market

Job Market:

- a) Current situation in Spain
- b) Expectations abroad
- c) Professionals with greater future

Current and future scenarios of professional practice

- a) Software Factories
- b) Information Security
- c) e-Government
- d) computer forensic
- e) Services of the Information Society and Electronic Commerce
- f) Ergonomics and access for people with disabilities
- g) ERP and business management
- h) Other scenarios of future

Professional Certifications

- a) The certificate Vs the title
- b) Some of the most popular certificates

5. Professional Skills

Professional Skills:

- a) Effective Presentations
- b) Negotiation
- c) Preparation and exposure of writings
- d) Teamwork

6. Introduction to Law

Introduction to Law:

- a) Legal system.
- b) Sources of Law. Types of standards.
- c) The rules of law as "state of the art". Design of software and law compliance.



7. The fundamental right to data protection (I). Constitutional protection of privacy.

Constitutional protection of privacy:

- a) The rights to individual and family privacy, honor and reputation.
- b) The inviolability of the home and secrecy of communications.
- c) The fundamental right to data protection

Regulations of the Fundamental Right to Data Protection (I): Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and Organic Law 3/2018, of 5 December, on the Protection of Personal Data and Guarantee of Digital Rights:

- a) Basic concepts
- b) Principles of data protection
- c) The rights of access, rectification, opposition, deletion, portability and treatment limitation
- d) Responsible for and in charge of the treatment. Special consideration for data protection and security from the design and default, and the impact assessment regarding data protection »

8. The fundamental right to data protection (II)

The fundamental right to data protection (II):

- a) Duty of confidentiality.
- b) Security measures.
- c) Security Audit and Audit Data Protection Act.
- d) Privacy by Design and Privacy Impact Assessment.
- e) Liability and sanctions regime.

9. Criminal Law. Digital specialties.

- a) Crimes against privacy.
- b) Computer Scams: Phishing and Pharming.
- c) The impersonation.
- d) Crimes against children.
- e) Intellectual Property Offenses
- f) Computer damage (Cracking and ransomware)
- g) The electronic evidence

10. E-commerce. Intellectual property.

E-commerce. Law 34/2002, of 11 July, on information society and e-commerce services (LSSI).

Law 3/2014, of 27 March, amending the consolidated text of the General Law for the Defense of Consumers and Users and other supplementary laws



- a) Basic obligations of service providers. Liability regime.
- b) Electronic contracting.
- c) Commercial communications by electronic means.
- d) Liability and sanctioning regime.

Intellectual property

- a) Basics.

Industrial property.

- a) Domain names.
- b) Brands.
- c) Patents.

Copyright

- a) Copyright and Intellectual Property Law.
- b) Alternative models: Creative Commons
- c) Intellectual property in software. Free and open source licenses.

11. Digital Identity, Electronic Signature and Artificial Intelligence.

Digital identity.

- a) Basics. Regulations (EU) 910/2014 on electronic identification and trust services for electronic transactions in the internal market (eIDAS) and 1183/2024
- b) Electronic signature typologies. Probationary value.
- c) Electronic certificates.
- d) Identification of citizens and management in the electronic administrative procedure.
- e) Requirements for electronic processing.

Artificial Intelligence. Regulation (EU) 2024/1732

- a) Basics.
- b) Legal aspects

WORKLOAD

PRESENCIAL ACTIVITIES

| Activity | Hours |
|---------------------|--------------|
| Theory | 30,00 |
| Laboratory | 10,00 |
| Classroom practices | 20,00 |
| Total hours | 60,00 |

NON PRESENCIAL ACTIVITIES

| Activity | Hours |
|--------------------------------|-------|
| Attendance at other activities | 0,00 |



| | |
|---------------------------------------|--------------|
| Individual or group project | 16,00 |
| Independent study and work | 26,00 |
| Preparation of lessons | 32,00 |
| Preparation for assessment activities | 8,00 |
| Resolution of case studies | 8,00 |
| Total hours | 90,00 |

TEACHING METHODOLOGY

The training activities are conducted in accordance with the following distribution:

- Theoretical activities.

In the theoretical issues will be developed to provide a global and inclusive view, analyzing in detail the key issues and more complex, promoting at all times student participation.

- Practical activities.

Complement the theoretical activities in order to apply the basic concepts and extend them with knowledge and experience they acquire during the course of the work proposed. Include the following types of activities



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- Classes of problems and issues in the classroom
- Discussion sessions and problem solving exercises and previously worked by students
- Workshops and seminars in computer classroom
- Group work and software project planning and generation of group dynamics.
- Scheduled tutorials (individual)

To carry out these activities, the theoretical group will be subdivided into subgroups smaller (20 students maximum) according to need.

- Individual student.

Preparation of classes and exams (study). This task is done individually and tries to promote self job.



- Work in small groups.

Realisation, by small groups of students (3-4), of work, issues and problems outside the classroom. This work complements the individual work and practical activities and promotes the ability to integrate into working groups

It will use the platform of e-learning (virtual classroom) from the University of Valencia in support of communication with students. Through it you will have access to learning materials used in class as well as solve problems and exercises.

EVALUATION

In the evaluation of this subject, it should be considered that it is composed of two clearly differentiated content blocks: "Ethics and Profession" and "Legislation". Each block of the course will have a weight of 50% in the final note of the subject, calculated as the arithmetic mean of the scores of both blocks. A minimum score of 4 points (out of 10) on each of the blocks ("Ethics and Profession" and "Legislation") is required to pass the course. The student's involvement in the teaching-learning process will be actively assessed, considering regular attendance at the planned face-to-face activities, the delivery of the proposed exercises and participation in the resolution thereof, completing with the performance of an objective test. In accordance with this approach, the final grade of the subject will be obtained according to the following two options:

OPTION A:

This is the primary method and applies independently for each of the content blocks ("Ethics and Profession" and "Legislation"). To apply this type of assessment, an attendance rate for the practical classes of each block greater than 75% and having delivered at least 75% of the work required in each block



will be necessary. Only works submitted before the maximum date stipulated by the teacher, both the proposed exercises in class (theory and practices), and the laboratory exercises, will be considered validly delivered. The final note for each of the blocks will be calculated according to the following evaluation criteria:

1) Ongoing assessment: Participation and work carried out during the semester (case studies, commissioned work and other objective tests carried out during the semester). They will have a weight of 50% on the final note. The teacher of each of the content blocks will stipulate the evaluation criteria of the deliveries, as well as their weight in the final note of the "Continuous Evaluation". Practical work carried out during the classes is not recoverable.

2) Individual objective test: consisting of an examination or test of knowledge, which will comprise both theoretical and practical issues, weighing 50% on the final note. In order for the final note of each content block to be computed, the continuous evaluation and individual objective test must be greater than 4 points out of 10.

OPTION B:

It will apply to students who have not met the conditions under option A. In this case, the assessment will consist of an "individual objective test" consisting of an examination or knowledge test, which will comprise both theoretical and practical issues, with a weight of 100% on the final note. The final note will be the result of the individual objective test which, in no case, may exceed 7.0 points out of 10.

The note required to pass each part of the course must be greater than 5 points out of 10. In cases where there may be a discrepancy about which option to apply, the one that may be most favorable to the student will apply, provided that it meets all the requirements for its application.

In any case, the assessment of the subject will be carried out in accordance with the Regulations for the evaluation and qualification of the University of València for the degree and master's degree approved by the Governing Council of 30 May 2017 (ACGUV 108/2017).

Copying or plagiarism of any activity that is part of the evaluation will result in the impossibility of passing the course, and the student will then be subject to the appropriate disciplinary procedures indicated in the ACTION PROTOCOL FOR FRAUDULENT PRACTICES AT THE UNIVERSITY OF VALENCIA (ACGUV 123/2020).

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- Referencia c1: Lessig, Lawrence. Por una cultura libre: cómo los grandes grupos de comunicación utilizan la tecnología y la ley para clausurar la cultura y controlar la creatividad. 1a edición. Madrid: Traficantes de Sueños, 2005. Referencia c2: Lessig, Lawrence, Florencio Cabello, and María Acuyo. El código 2.0. 1a edición. Madrid: Traficantes de sueños, 2009. Referencia c3: Lessig, Lawrence, and Ernesto Alberola. El código y otras leyes del ciberespacio. Madrid: Taurus, 2001. - Lessig, Lawrence, Florencio Cabello, and María García Perulero. Remix: cultura de la remezcla y derechos de autor en el entorno digital. Barcelona: Icaria, 2012. Referencia c4: Lessig, Lawrence. The future of ideas: The fate of the commons in a connected world. Vintage, 2002. Referencia c5: Raymond, Eric S. The Cathedral and the Bazaar: Musings on Linux and Open Source by an Accidental Revolutionary. Revised and expanded edition. Sebastopol, California: OReilly, 2001. Referencia c6: Peguera Poch, Miquel. Derecho y nuevas tecnologías. UOC, Barcelona, 2005. Referencia c7: John Wecker, Douglas Adeney. Ética Informática y de las Ciencias de la Información. Fragua, 1999. ISBN 2910007044977 .