



COMILLAS

UNIVERSIDAD PONTIFICIA

ICAI

ICADE

CIHS

Syllabus
2025 - 2026

GENERAL INFORMATION

Data of the subject	
Subject name	Ethics
Subject code	DOI-GITT-421
Main program	Bachelor's Degree in Engineering in Telecommunication Technologies
Involved programs	Grado en Ingeniería en Tecnologías de Telecomunicación [Fourth year] Grado en Ingeniería en Tecnologías de Telecom. y Grado en Análisis de Negocios/Business Analytics [Fourth year]
Level	Reglada Grado Europeo
Quarter	Semestral
Credits	3,0 ECTS
Type	Obligatoria (Grado)
Department	Department of Industrial Organization
Coordinator	José Ángel Ceballos Amandi.

Teacher Information	
Teacher	
Name	José Carlos Romero Mora
Department	Department of Industrial Organization
Office	D-418
EMail	Jose.Romero@iit.comillas.edu

DESCRIPTION OF THE SUBJECT

Contextualization of the subject
Prerequisites
None.
A feature that is increasingly typical of some engineering courses – such as those taught at ICAI – is their generalist nature. And a clear reflection of this is the extraordinary breadth of professional activities that these engineers can access. It is not, therefore, strange to find engineers developing their professional careers not only in industrial organizations, or in positions with a technological profile, but also in sectors of activity such as finance, auditing, business consulting and, in short, any of the traditionally considered “management”. On the other hand, the number of engineers who direct their professional lives towards the development of their own business project is also increasing. From this perspective, far from being a profession closed on itself, professional practice demands of these engineers the challenge of knowing how to contribute their effort and knowledge in contexts where they will inevitably and daily be faced with dilemmas and implications of an ethical nature regarding professional, which will not only affect them personally, but will also have consequences



beyond their own lives.

To deal with these situations, mere ethical sensitivity is not enough, which sometimes translates into evaluations resulting from mere uncritical subjective intuitions. On the contrary, they must be able to perceive the ethical implications of the situations they face and the consequences that may follow from their decisions, in order to be able to assume them responsibly. And this from the perspective of the rational and well-founded justification of its ethical criteria and evaluations.

For all this, together with the specific technical training of their respective specialties, it is essential that the future engineer be trained to know how to address the ethical implications of his activity in a solvent and responsible manner.

Although it is a subject specifically oriented to the ethical aspects that arise in the professional practice of the engineer, among the general principles that this subject takes into account are the Sustainable Development Goals and that any professional activity must be carried out with respect for the fundamental rights and equality before the law. In this sense, respect and promotion of Human Rights and the principles of universal accessibility for people with disabilities are specifically promoted, as a basic condition for a society based on coexistence and dialogue.

Course contents

Contents

1. Anthropological Foundations of Professional Ethics. Dignity, freedom, action, and moral judgment. Concept of responsibility.
2. Principles of professional ethics: beneficence, autonomy, justice, and responsibility.
3. The technological context. Efficiency and sustainability. Side effects. Social and environmental impact.
4. The corporate context. Economic and cultural paradigms. Market, strategies, tools, and management policies. Social justice.

EVALUATION AND CRITERIA

The use of AI to produce full assignments or substantial parts thereof, without proper citation of the source or tool used, or without explicit permission in the assignment instructions, will be considered plagiarism and therefore subject to the University's General Regulations.

Evaluation activities	Evaluation criteria	Weight
Final exam of theoretical and practical nature	• The teacher will communicate the characteristics of the exam and the correction and grading criteria with the necessary advance notice. • The student may always request the grading rubric during exam reviews. In the case of test exams, the rubric is replaced by the explanation of the correctness or incorrectness of each answer. • In the case of tests, the correction formula will always be specified. • The final exam will be unique, and in no case will it be "breakable" into different exams.	50



Continuous performance evaluation: • Individual or group practical work. • Projects developed by students. • Exercises or problems solved by students individually or in groups. • Short continuous evaluation tests. • Class participation. Attendance and attitude in class.	• At the beginning of the course, the types of work that make up this section, the delivery schedule and their weight in the grade will be communicated. • In relation to participation, attendance and attitude in class, the teacher will determine at the beginning of the subject the specific way of evaluation. • In the works will be especially valued the ability of synthesis, the ability to respond to the questions posed, the clarity of the conclusions and the visual quality of the presentation. • In every written exercise, a Turnitin index of 30% or higher will necessarily require justification. • Cases, papers or reports delivered after the deadline will be considered undelivered. • Failure to deliver or present cases, assignments or reports will result in failure (zero) in the corresponding grading section. • No test or exercise in this section may have a liberating nature applicable to the final exam.	50
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Grading

GRADING CRITERIA:

- For written assignments (individual, group, etc.), submission of the document on time and in the correct manner is considered an essential requirement for presentation and defense before the professor. The grade for the assignment will be the same as the defense.
- Failure to comply with the deadline or formal requirements will result in the denial of the defense and the subsequent failure of the assignment.
- The average grade for assignments, cases, or reports will only be determined when the final exam is passed (minimum passing grade: 5.00). If the exam is failed, the course will be graded with its grade.
- Committing a serious academic offense, such as plagiarizing previously published materials or copying an exam or other assessed activity, may result in disciplinary proceedings and the loss of any sittings established by the faculty regulations.
- For written assignments, a Turnitin score above 30% will require justification.
- **COLLABORATION WITH AI (Level 3):**
 - AI can be used to assist in completing the assignment, including idea generation, writing, feedback, and assessment. Students must critically evaluate and modify the outputs suggested by the AI, demonstrating their understanding.
 - You can use AI to perform specific tasks, such as writing texts, refining and assessing your work. You must critically evaluate and modify any AI-generated content you use.
 - Misuse of AIs by students will be considered a serious offense, according to the University's General Regulations, art. 168.2.e: "carrying out actions intended to falsify or defraud academic performance assessment systems."
 - The consequences of this may include "temporary expulsion for up to three months or a ban from taking the exam in the next session, or the imposition of a sanction, in one or more subjects in which the student is enrolled, [...] in addition to a failing



grade (0) in the respective subject, [...] [and] a ban from taking the exam in that subject in the next session."

- The use of AI to create complete or relevant parts of papers, without citing the source or tool, or without being expressly permitted in the work description, will be considered plagiarism and regulated in accordance with the University's General Regulations.
- Unjustified absence from more than 15% of class sessions may result in the loss of the right to take the exam in the sessions established by the Faculty's regulations (Article 93.1 of the General Regulations).
- Failure to attend the first hour of a double class will result in the application of a failure to attend the entire session, regardless of whether the student attends the second hour.
- The professor will determine the attendance monitoring system at the beginning of the course and will periodically inform students of their progress.
- Cases, assignments, or reports submitted after the deadline will be considered unsubmitted.
- Failure to submit, present, or complete cases, assignments, reports, or exercises will result in a fail (zero) in the corresponding grading section.
- If the subject is failed in the regular session, the grades for the assignments, cases, reports, or exercises provided in this teaching guide and submitted in the regular session may be applied to the extraordinary grade. In this case, the student will only be required to complete the failed or unsubmitted assignments, cases, reports, or exercises.
- For our own students who are on an exchange abroad and must take an exam for the subject, or in any other case where class attendance is not required, the grading system will consist solely of a final theoretical exam on the content determined by the Area Coordinator. In these cases, the final grade will be the grade obtained on the exam.
- In the case of exchanges (Out), it is the student's responsibility to contact the instructor well in advance to specify the exam content.
- Unless otherwise stated, in all exam sessions, assignments, and exercises of any kind must have a grade of at least 5.00 out of 10.00 to pass.

BIBLIOGRAPHY AND RESOURCES

Basic References

Villas, M.; Camacho, J.. Manual de Ética Aplicada en Inteligencia Artificial. Anaya, 2022.

Harris, Ch.E.; Pritchard, M.S.; Rabins, M.J., Engineering Ethics. Concepts and Cases. Wadsworth. 4th ed. 2009.

Martin M.W.; Schinzinger R., Introduction to Engineering Ethics. McGraw-Hill Higher Education. 2nd ed. 2010.

Johnson, D.G.; Wetmore, J.M. Technology and Society: Building our Sociotechnical Future (Inside Technology). MIT Press. 2008.

Kallman, E.A.; Grillo, J.P. Ethical Decision Making & Information Technology: An Introduction with Cases. McGraw-Hill. 1996.

Bilbao, G.; Fuertes, J.; Guibert, J.M. Ética para Ingenieros. Desclée De Brower. 2006.

Etxeberría, X. Ética básica. Universidad de Deusto. 1998.

Etxeberría, X. Temas básicos de ética. Desclée De Brower. 2002.

Hortal, A. Ética general de las profesiones. Desclée De Brower. 2002.

Hortal, A. Ética profesional y universidad. Universidad Católica Andrés Bello. 2007.

Throughout the subject, updated bibliographic information may be provided.



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