Universitat Autònoma de Barcelona

**2021/2022**

# Security and Technology

Code: 105744
ECTS Credits: 6

| Degree | Type | Year | Semester |
|---|---|---|---|
| 2502501 Prevention and Integral Safety and Security | OT | 4 | 0 |

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

## Contact

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## Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: No
Some groups entirely in Spanish: No

## Prerequisites

This subject doesn't have any pre-requierments

## Objectives and Contextualisation

The massive incorporation of new technologies throughout the last decades in our societies, has led to a paradigm shift when analyzing our relationship with the context, and with the processes of regulation and organization of coexistence. This process of digitalization has in turn led to new risks associated with new parameters of social exclusion, lack of representation of minorities, as well as other types of social dysfunctionality, such as new types of crime and criminal practices. Throughout this course, we will explore the new technological frameworks, as well as disruptive technologies that have a transforming vocation in key aspects of the safety culture.
TRAINING OBJECTIVES
This subject aims to present the student with the transformations in the technological paradigms that advance substantial changes in our perception of security and privacy. The emergence of the AI, the Block Chain, the facial recognition systems, or the automation and digitalization of processes clearly affect our security systems, and the very notion of the concept of security. Throughout this course we will present and analyze the current state of art of the technological frameworks and of the main debates that are structured in relation to the potential affectation to the security of the person, to the very concept of human dignity, and to the basic freedoms associated with the development of the subject. Special attention was given to concepts such as "meaningful human control".

## Competences

- Carry out analyses of preventative measures in the area of security.
- Identify the resources necessary to respond to management needs for prevention and integral security.
- Know how to communicate and transmit ideas and result efficiently in a professional and non-expert environment, both orally and in writing.
- Make efficient use of ITC in the communication and transmission of results.
- Respond to problems applying knowledge to practice.
- Use the capacity for analysis and synthesis to solve problems.
- Work and learn autonomously.

- Work in institutional and interprofessional networks.

## Learning Outcomes

1. Analyse specific risks and understand the prevention mechanisms.
2. Diagnose the situation of integral security in companies and organisations.
3. Identify, develop or acquire and maintain the main resources necessary to respond to tactical and operational needs inherent in the prevention and security sector.
4. Know how to communicate and transmit ideas and result efficiently in a professional and non-expert environment, both orally and in writing.
5. Make efficient use of ITC in the communication and transmission of results.
6. Respond to problems applying knowledge to practice.
7. Use the capacity for analysis and synthesis to solve problems.
8. Work and learn autonomously.
9. Work in institutional and interprofessional networks.

## Content

## Content

This subject has a Manual where the theoretical contents of the same are reflected, which will be complemented with readings and documentaries.
The topics to be discussed are the following:
Topic 1 Introduction to technological determinism
Topic 2 Technological disruption
Topic 3 Artificial Intelligence
Topic 4 Block Chain
Topic 5 Technology and security - Face recognition and Autonomous Systems
Topic 6 Ethics and technology - Meaningful Human Control

## Methodology

Taking into account that the aim of achieving the learning objectives described in this Guide, we will develop a methodology that combines the individual study from the Manual, and the readings that will be presented in each topic, in addition of some documentaries.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## Activities

| Title | Hours | ECTS | Learning Outcomes |
|---|---|---|---|
| Type: Directed | | | |
| Class | 40 | 1.6 | 1, 4, 2, 6, 5, 3, 9, 8, 7 |
| Evaluation | 4 | 0.16 | 1, 4, 2, 6, 5, 3, 9, 8, 7 |
| Type: Supervised | | | |
| Continuous evaluation excercice I and II | 12 | 0.48 | 1, 4, 2, 6, 5, 3, 9, 8, 7 |
| Type: Autonomous | | | |

| | | | |
|---|---|---|---|
| Individual study | 94 | 3.76 | 1, 2, 6, 5, 8 |

## Assessment

Individual work
The student must present an evaluation and classification of a risk, as well as a methodology of governance suggested for it.
Team work
In groups of a maximum of 4 people a work must be done, based on a specific technology, to be chosen by the student, this work will have a minimum extension of 20 pages (Annexes apart) in Times New Roman 11 with an interline interval of 1.15 and normal margins. The work must include a minimum of 15 bibliographical citations (APA 6TH edition), as well as an automated index and its delivery will be done in Word format through the Moodle Classroom. And it must include not only the context, antecedents, categories and classification of the risk in question, but also it must propose a governance system based on the methodologies described in the Manual.
It will be valued:

- Spelling and grammar correction
- The use of vocabulary and concepts specific to the subject
- Depth of Analysis
- Specification of the proposed governance methodology
- Originality of the content (the inclusion of plagiaries supposes a zero in the note)

Exam
Final examination of the subject (40% of the overall grade) The exam will consist of multiple choice questions and / or to develop and will be based on the contents of the 8 subjects of the manual plus the mandatory readings. The exams can be done both in oral and written format
Continuous evaluation and reevaluation
If a PEC is not done, it would go from continuous evaluation to final evaluation. That is, 100% of the grade will be the final exam for July. The approval in this way, or by way of recovery will suppose a 5 as maximum grade in the student's file. Incase of not passing the subject according to the above-mentioned criteria (continuous evaluation), a recovery test may be done on the date scheduled in the schedule, and that will cover the entire contents of the program. To participate in the recovery the students must have been previously evaluated in a set of activities, the weight of which equals a minimum of two thirds of the total grade of the subject. However, the qualification that will consist of the student's file is a maximum of 5-Approved.
Students who need to change an evaluation date must submit the request by filling in the document that you will find in the moodle space of Tutorial EPSI.
Plagiarism
Without prejudice to other disciplinary measures deemed appropriate, and in accordance with current academic regulations, "in the event that the student makes any irregularity that could lead to a significant variation in the grade of an evaluation act, it will be graded with a 0 This evaluation act, regardless of the disciplinary process that can be instructed In case of various irregularities occur in the evaluation acts of the same subject, the final grade of this subject will be 0 ". The tests / exams may be written and / or oral at the discretion of the teaching staff

Students that retake the course

Regarding those students who have to retake the course, it should be emphasized that the assessment methodology is the same as for other students.

## Assessment Activities

| Title | Weighting | Hours | ECTS | Learning Outcomes |
|---|---|---|---|---|
| Continuous evaluation excercice 1 (Individual Work) | 20% | 0 | 0 | 1, 4, 2, 6, 5, 3, 9, 8, 7 |
| Continuous evaluation test 2 (team Work) | 30% | 0 | 0 | 1, 4, 2, 6, 5, 3, 9, 8, 7 |

| | | | | |
|---|---|---|---|---|
| Exam | 50% | 0 | 0 | 1, 4, 2, 5, 3, 9, 7 |

## Bibliography


Ellul, J., Wilkinson, J., & Merton, R. (1964). *The technological society*. Nueva York: Random House.

Jasanoff, S. (2016). *The Ethics of Invention: Technology and the Human Future*. WW Norton & Company.

Jasanoff, Sheila. (2003). Technologies of humility: citizen participation in governing science. *Minerva*, *41*(3), 223-244.

Jasanoff, Sheila. (2009). *Science at the bar: Law, science, and technology in America* (1st ed.). Cambridge England etc.: Harvard University Press.

Martinez-Quirante, R., & Rodríguez-Alvarez, J. (2018). *Inteligencia artificial y armas letales autónomas: un nuevo reto para Naciones Unidas*. Oviedo: Trea. Retrieved from https://www.trea.es/books/inteligencia-artificial-y-armas-letales-autonomas-un-nuevo-reto-para-naciones-unidas

Marx, L. (2000). *The machine in the garden: technology and the pastoral ideal in America*. Oxford: Oxford University Press.

Postman, N. (2011). *Technopoly: The surrender of culture to technology*. Nueva York: Vintage Books.

Rodríguez, J. (2016). *La civilización ausente: Tecnología y sociedad en la era de la incertidumbre* (1st ed.). Oviedo: Trea.


## Software

This subject will use the basic software of the Office 365 package