

Protection Systems

Code: 101873
ECTS Credits: 6

Degree	Type	Year	Semester
2502501 Prevention and Integral Safety and Security	OT	4	1

Contact

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Use of Languages

Principal working language: spanish (spa)
Some groups entirely in English: No
Some groups entirely in Catalan: No
Some groups entirely in Spanish: Yes

Prerequisites

This subject does not have any pre-requirement

Objectives and Contextualisation

Consolidate and expand knowledge acquired, in previous years, in various subjects.

Bring them to the practical application level and prepare the student for immediate use of labor requirements.

We will deal with the applications of electronic security, such as physical, human and logical security, in the part corresponding to the patrimonial security manager and/or Director of Security.

Security Project. Risk Analysis. Intelligence applied to Security.

Regulations and Legal Application to Sectors.

Access Control, Physical Security, Biometrics.

Detection Equipment.

Video surveillance services. Application in Professional Sectors.

Services associated with Electronic Security Systems.

Perimeter Security.

The theoretical content will be reinforced and accompanied by practical exercises.

The students will help to shape the subject, depending on their concerns and manifest preferences.

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Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Apply the legal regulations governing the sector of prevention and integral security.
- Be able to adapt to unexpected situations.
- Carry out analyses of preventative measures in the area of security.
- Efficiently manage human resources.
- Generate innovative and competitive proposals in research and in professional activity developing curiosity and creativity.
- Identify, manage and resolve conflicts.
- Make changes to methods and processes in the area of knowledge in order to provide innovative responses to society's needs and demands.
- Plan and coordinate the resources of the three large subsystems that interact in questions of security: people, technology and infrastructures.
- Respond to problems applying knowledge to practice.
- Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
- Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
- Take account of social, economic and environmental impacts when operating within one's own area of knowledge.
- Use the capacity for analysis and synthesis to solve problems.

Learning Outcomes

1. Analyse the situation and identify the points that are best.
2. Apply the rules of professional practice for private security and private research.
3. Be able to adapt to unexpected situations.
4. Critically analyse the principles, values and procedures that govern professional practice.
5. Diagnose the situation of integral security in companies and organisations.

6. Generate innovative and competitive proposals in research and in professional activity developing curiosity and creativity.
7. Identify, manage and resolve conflicts.
8. Plan and manage prevention and security in accordance with the prevailing legislation applicable in the sector.
9. Propose new methods or well-founded alternative solutions.
10. Propose viable projects and actions that promote social, economic and environmental benefits.
11. Respond to problems applying knowledge to practice.
12. Select the minimum resources for efficient risk management.
13. Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
14. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
15. Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
16. Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
17. Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
18. Undertake collaborative management of private security plans.
19. Use the capacity for analysis and synthesis to solve problems.

Content

U0 - Concepts, Regulations and Legal Application to Sectors.

Introduction to Security Systems.

Risk analysis.

Regulations and legal application by sectors.

Intelligence applied to Security.

U1 - Access Control, Physical Security, Biometrics

Access control applications according to the environment.

Physical Protection.

Access control systems for people, vehicles and objects.

Applied technologies.

Access control equipment for doors

U2 - Detection Teams.

Connection of detection systems.

Alarm Centers.

Keyboards.

Configuration example.

Point detectors.

Microwave.

Infrared.

Perimeter detection systems.

Video detection systems.

System integration.

U3 - Video Surveillance Systems (SVV).

Typology of facilities.

SVV cameras.

opticians

Video transmission methods.

IP video systems.

Image compression.

Video Communications Protocols.

Recorders.

Cameras with resolutions higher than 4K.

Vision in very low light environments.

Dynamic range and backlight treatment.

Image analytics.

Management software.

License Plate Recognition (LPR).

Artificial intelligence.

U4 - Public address system.

Typology of facilities.

Dissuasive loudspeaker.

Public address system for emergency, evacuation and/or confinement.

U5 - Security Services.

Preventive Maintenance.

Corrective maintenance.

Predictive Maintenance.

All risk maintenance.

Alarm Receiving Center (CRA).

Control center.

Methodology

The theoretical classes in the classroom will combine the master classes, and the development and resolution of work exercises.

The practical classes in the classroom will consist of the development of exercises and works in which some of the concepts presented in the theoretical classes will be applied in practice. Subsequently a joint venture will be held from which the corresponding academic conclusions will be deferred.

The autonomous activities will correspond to both the personal study and the resolution of the exercises and works proposed by the teacher. Each student will have to do research on documentation of the subjects related to the subject matter of study and personal consolidation work about what has been presented in class (programmed readings, individual exercises). In addition you will have to follow up and study different exercises and practical cases.

The assessment activities will evaluate the knowledge and competences acquired by the students, in accordance with the criteria presented in the following section.

Tutorials with the teaching staff will be arranged by email.

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			
Theoretical and practical classes with the participation of students	44	1.76	3, 4, 1, 2, 5, 11, 6, 18, 7, 8, 9, 10, 17, 16, 15, 13, 14, 12, 19
Type: Supervised			
Tutoring with students	12	0.48	3, 4, 1, 5, 11, 6, 18, 7, 8, 9, 10, 19
Type: Autonomous			
Resolution of practical cases. Realization of works. Personal study	94	3.76	3, 4, 1, 2, 5, 11, 6, 18, 7, 8, 9, 10, 17, 16, 15, 13, 14, 12, 19

Assessment

1- Periodic exercises

Throughout the course, work and exercises will be required, the delivery of these in the periods indicated for the final evaluation. The delivery of at least 2/3 of those proposed will be required to evaluate the subject. The non-presentation in time will evaluate how 0 (zero). These evaluable works can be proposed to solve directly on theoretical or practical classes day.

They will qualify from 0 to 10, will be average among all of them and will have a specific weight in the global of the subject of 20%.

2- Theoretical tests - individual practices

They will be done during the course 2 exams. Each one will have a theoretical part and a practical part. The specific weight of the exams on average is 50% on the overall course.

3- Course work

The student will have to do a long-distance job that must be delivered no later than three weeks before the end of the course. The evaluation will be from 0 to 10. It will have a specific weight in the final mark of 30%

The course work is essential for the evaluation of the subject and must be obtained at least 5 out of 10. For students who do not pass this grade, having handed over a project that is evaluable in the expected dates, there will be a 15-day replacement period for the delivery of the corrections proposed by the teacher in the retro-valuation. In this case the maximum assessment of the work will be 5.

EVALUATION

If you do not pass the subject in accordance with the aforementioned criteria (continuous assessment), you can do a recovery test on the scheduled date in the schedule, and that will cover all the contents of the program.

To participate in the recovery students must have been previously evaluated in a set of activities, the weight of which is equivalent to a minimum of two thirds of the total grade of the subject. However, the qualification that will appear on the student's file is of a maximum of 5-Approved.

Students who need to change an evaluation date must submit the request by filling in the document that will be found in the moodle "Tutoritzacio" space.

Without prejudice to other disciplinary measures deemed appropriate, and in accordance with the current academic regulations, "in the event that the student conducts any irregularity that may lead to a significant variation of the rating of an assessment act, this evaluation act will be evaluated with a 0, regardless of the disciplinary process that can be instructed. In the event that there are several irregularities in the evaluation acts of the same subject, the final grade of this subject will be 0".

Tests or exams may be written or oral at the discretion of the teaching staff.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Course work- long distance and presentation and defense and continuous evaluation	30%	0	0	3, 4, 1, 2, 5, 11, 6, 18, 7, 8, 9, 10, 17, 16, 15, 13, 14, 12, 19
Evaluation of the works requested, made and presented by the student	20%	0	0	1, 2, 5, 11, 6, 7, 8, 9, 10, 17, 16, 15, 13, 14, 12, 19
Theoretical tests and individual practices: Oral written tests that allow to assess the knowledge acquired by the student.	50%	0	0	4, 1, 2, 5, 11, 8, 9, 17, 16, 15, 13, 14, 12

Bibliography

Law 5/2014, of 4 April, on Private Security. (Official State Gazette, 2014).

Royal Decree 2364/1994, of 9 December, approving the Private Security Regulations. (Official State Gazette, 1994).

ORDER of April 23, 1997 by which certain aspects are specified in the matter of security companies, in compliance with the Law and the Regulation of Private Security.

Order INT/314/2011, of 1 February, on private security companies. (Official State Gazette, 2011).

Order INT/316/2011, of 1 February, on the operation of alarm systems in the field of private security. (Official State Gazette, 2011).

Order INT/317/2011, of 1 February, on private security measures. (Official State Gazette, 2011).

Order INT/318/2011, of 1 February, on private security personnel. (Official State Gazette 2011).

Order INT/826/2020, of 3 September, by which modify in relation to deadlines of adequacy of measures of electronic security.

IRP/198/2010, of 29 March, which establishes the criteria for action for the maintenance and verification of security systems and communication to the police of the Generalitat-mozos de escuadra of alarm warnings.

RESOLUTION of November 16, 1998, of the Secretary of State for Security, by which approve the official models of the Books-Registry that are established in the Regulation of Private Security.

Spanish Agency for Data Protection. Guide on the use of camcorders for security and other purposes.

Generalitat of Catalonia. Police recommendations for video surveillance systems.
CGRIP-RPD-9274-V01-GUI-SPA.

Students will be given the manual prepared by David Zabas García, plus additional documentation for expansion and consultation.

Software

This subject will use the basic software of the office 365 package and the AutoCad software (student license).