

## Course guide

### 230715 - CSMAGT - Cybersecurity Management

**Last modified:** 11/04/2025

**Unit in charge:** Barcelona School of Telecommunications Engineering  
**Teaching unit:** 744 - ENTEL - Department of Network Engineering.

**Degree:** MASTER'S DEGREE IN TELECOMMUNICATIONS ENGINEERING (Syllabus 2013). (Optional subject).  
MASTER'S DEGREE IN ADVANCED TELECOMMUNICATION TECHNOLOGIES (Syllabus 2019). (Optional subject).  
MASTER'S DEGREE IN CYBERSECURITY (Syllabus 2020). (Optional subject).

**Academic year:** 2025    **ECTS Credits:** 5.0    **Languages:** English

#### LECTURER

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**Coordinating lecturer:** JOSEP RAFEL PEGUEROLES VALLES

**Others:** Primer quadrimestre:  
JOSEP RAFEL PEGUEROLES VALLES - 10

#### PRIOR SKILLS

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It is assumed that if you have successfully completed the enrollment process for the master's degree in cybersecurity, you have the proper background to follow the course.

#### REQUIREMENTS

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There are no preliminary requirements although being familiar with network security topics will help

#### TEACHING METHODOLOGY

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The course is structured in 12 sessions (3 hours long).

In the first 6 sessions we introduce the main concepts related to Cybersecurity Compliance (mainly ISO 27001, ENS and LOPDGDD

The last 6 sessions the students, working in groups of 4-5 people, develop a real Compliance Exercise to practice the main items in a certification process.

Besides that, in the last 6 sessions we also invite professionals from the industry to present hot topics on cybersecurity.

#### LEARNING OBJECTIVES OF THE SUBJECT

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Understand the concept of regulatory and legislative compliance in the field of cybersecurity.

Be familiar with the main aspects of ISO 27001 certification.

Know the key concepts of the National Security Framework (Esquema Nacional de Seguridad).

Understand the main contents of the LOPDGDD (Spanish Data Protection Law).

Learn about the most advanced cybersecurity technologies, according to industry professionals.

Learn to search for accurate and useful information on innovative topics.

Become familiar with the most advanced cybersecurity technologies, explained by industry professionals.

Learn to search for accurate and useful information on innovative topics

## STUDY LOAD

Type	Hours	Percentage
Hours large group	39,0	31.20
Self study	86,0	68.80

**Total learning time:** 125 h

## CONTENTS

### ISO27001. ENS. LOPDGDD. Invited talks

**Description:**

ISO27001. ENS. LOPDGDD.

Exemples of invited talks: Legaltech Forensics Security in 5G challenges SOC's and SIEM eVoting Cybercrime economy Ethical Hacking Secure AI Purple approach of pentesting

**Full-or-part-time:** 0h 39m

Theory classes: 0h 39m

## GRADING SYSTEM

The final qualification will be calculated by assessing the different exercises of each project: Determination of context and scope, Risk assessment, Policies, Statement of Applicability, ...

## EXAMINATION RULES.

All reports of each topic have the same weight, and an overall percentage of the 60% of the final grade.

20% of the final mark will depend on peer assessment with the classmates.

10% of the final mark will depend on attendance (80% of attendance mandatory)

10% of the final mark will depend on debates and participation in the invited lectures from the industry.

## BIBLIOGRAPHY

**Basic:**

- Wens, Cees Van der. ISO 27001 ISMS Handbook : implementing and auditing an Information Security Management System in small and medium-sized businesses. [Lloc de publicació no identificat]: Deseo, [2023]. ISBN 9798852486288.

- Wens, C. Van der. ISO 27001 controls handbook: implementing and auditing 93 controls to reduce information security risks. Deseo, 2023. ISBN 9798861393560.