



## GENERAL INFORMATION

Data of the subject	
Subject name	Penetration Testing and Vulnerability Management
Subject code	DTC-MCS-516
Main program	
Credits	3,0 ECTS
Type	Obligatoria
Department	Department of Telematics and Computer Sciences
Coordinator	Rafael Palacios
Course overview	The "Intrusion Tests" also known as "Pentest" are a set of tests used so that companies know their weak points and can mitigate them. The "Vulnerability Management" allows knowing the state of the threats detected on an organization, knowing at all times the level of exposure and helping to apply measures that solve them. In this course, you will learn in a theoretical and practical way all the basic concepts to run tests that allow you to analyze the level of exposure of an organization and how to manage the localized findings so that those actions that are necessary are implemented.

Teacher Information	
Teacher	
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## DESCRIPTION OF THE SUBJECT

Contextualization of the subject
Prerequisites
Experience with using virtual machines with VMware or Virtual Box.

## Course contents

Contents
<b>Tema 1: Introduction</b> <ul style="list-style-type: none"><li>Phases of penetration testing</li><li>Recognition phase</li></ul>
<b>Tema 2</b> <ul style="list-style-type: none"><li>Test phases: Tool selection, Sending, Execution.</li><li>Examples of basic vulnerabilities</li></ul>

**Tema 3: Advanced vulnerabilities**

**Tema 4**

- Test phases: Installation, C&C, Actions on the target.
- Metasploit Framework
- Lateral movement and vertical movement

**Tema 5: Vulnerabilities**

- Vulnerability Management
- Automated analysis tools

## EVALUATION AND CRITERIA

### Grading

- **Lab reports (75%):** Average of all lab reports submitted during the course.
- **Final exam (25%):** Test exam.

## BIBLIOGRAPHY AND RESOURCES

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