uc3m Universidad Carlos III de Madrid

Physical security technologies

Academic Year: (2022 / 2023) Review date: 20/06/2022 12:51:41

Department assigned to the subject: Electronic Technology Department, Mechanical Engineering Department

Coordinating teacher: DIAZ ALVAREZ, ANTONIO

Type: Compulsory ECTS Credits: 6.0

Year: 4 Semester: 1

DESCRIPTION OF CONTENTS: PROGRAMME

Contents conducive to the acquisition of knowledge in:

- Comprehensive protection technologies for people and infrastructures.
- Analysis of personal protections for security.
- Basic principles of the dynamic behavior of materials intended for protection.
- Basic concepts of ballistics and explosion as well as the main methodologies and protocols for testing and manufacturing said personal protections.
- Vehicle and infrastructure protections.
- Electronic and communication technologies (detection systems, access control systems, surveillance, communication and transmission).

LEARNING ACTIVITIES AND METHODOLOGY

Due to the uncertainty about the teaching format to which the health circumstances will take us during the next academic year, it is expected to start in the blended modality, and may lead to 100% face-to-face or 100% on-line training as the spread or the control over the pandemic and the hygiene-sanitary norms that the Authorities of the sector dictate.

ASSESSMENT SYSTEM

% end-of-term-examination/test: 60 % of continuous assessment (assignments, laboratory, practicals...): 40

Continuous evalaution:

The subject is based on two clearly defined fields that distribute the subject's grade to 50%. The part of shields and protections, will be evaluated through a single test that computes at 50%. The electronics part, in which the laboratory practices are carried out, distributes the weight in 40% of the practices and 10% of the exam.

Attendance at practices and the realization of the respective report is mandatory.

BASIC BIBLIOGRAPHY

- Mohamed A. El-Reedy Blast Resistance Building Design, Smashwords, 2019
- National Research Council Protecting Buildings from Bomb Damage , The National Academies Press, 1995