uc3m Universidad Carlos III de Madrid

Systems security engineering

Academic Year: (2021 / 2022) Review date: 10-06-2021

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: GONZALEZ-TABLAS FERRERES, ANA ISABEL

Type: Electives ECTS Credits: 3.0

Year: 1 Semester: 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Not appropriate

DESCRIPTION OF CONTENTS: PROGRAMME

- Concepts of Secure Systems Engineering
- 2. Secure software requirements
- Secure software design
- 4. Security of implementations
- Testing
- Other issues

LEARNING ACTIVITIES AND METHODOLOGY

ACTIVITIES

Lectures

Laboratory practices

Tutoring sessions

Team work

Individual work

TEACHING METHODOLOGIES

Class lectures in which the main concepts of the subject are developed and the literature is provided to supplement student learning.

Resolution of laboratory practices and problems posed by the teacher individually or in group

Elaboration and oral presentation of technical works by the students

ASSESSMENT SYSTEM

Individual or group assignments during the course (100%)

Non-continuous modality assessment will consist on a final exam.

% end-of-term-examination: 0

% of continuous assessment (assignments, laboratory, practicals...): 100

BASIC BIBLIOGRAPHY

- Adam Shostack Threat modeling: Designing for security., John Wiley & Sons, 2014
- Mano Paul Official (ISC)2® Guide to the CSSLP® CBK®. Second edition., CRC Press, 2014