uc3m Universidad Carlos III de Madrid

Master's Thesis

Academic Year: (2023 / 2024) Review date: 21-09-2023

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: SANCHEZ MACIAN PEREZ, ALFONSO ALEJANDRO

Type: Master Final Project ECTS Credits: 12.0

Year: 1 Semester: 0

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

36 ECTS of compulsory subjects (including both seminars) and 12 ECTS of elective subjects.

OBJECTIVES

Capability of developing and applying original ideas often in a research context. (CB6)

Capability of applying the knowledge acquired from the different subjects of the Master to solve problems in new environments or less familiar for the student taking into account a bigger (even multidisciplinar) context. (CB7)

Capability to relate and integrate knowledge and facing the complexity of making judges from incomplete or partial information, including student's personal reasoning judgement and knowledge. This includes taking into account legal and ethical questions about the consequences of executing a given procedure given a particular context. (CB8)

Capability of concisely communicating the student's personal conclusions, including the knowledge and reasons those conclusions are based on, to an specialized or non specialized audience. (CB9)

Learning abilities to allow further study and follow technology evolution. (CB10)

Besides, the student will also acquire the specific competences related to the chosen field of the Master Thesis, and will enforce the related general competences.

LEARNING OUTCOMES

After completing the TFM the student will have:

Acquired the general knowledge in terms of elaboration of a complete professional project related to some aspects of the Master.

Elaborated the technical part of a complete project using the needed technical means and developing prototypes, simulations, writing reports, etc.

Made a written and oral presentation of the job.

Acquired consciousness of the social and ethical aspects of the Cybersecurity towards the incorporation to the labour market.

DESCRIPTION OF CONTENTS: PROGRAMME

The Master Thesis, hereinafter TFM, is the development, delivery and public defense of an original work related to some Cibersecurity area.

The supervisor of the TFM will be a teacher of the Master Program or a teacher of one of the three

involved departments.

The work documentation will follow the working rules of technical articles. The student will ellaborate and submit a document detailing the work done. This document will include the review of the related state of the art, the followed methodology, the used tools, the detailed description of the proposal or solution, and the time scheduling and cost expenses.

LEARNING ACTIVITIES AND METHODOLOGY

The TFM is an autonomous activity realized under supervision, and consistent with the identified problem: context and present knowledge of the problem, evolution proposals, work methodologies proposed, learning the applicable toools for the solution, etc.

The supervisor will schedule the tutoring hours.

ASSESSMENT SYSTEM

The assessment on the TFM will be performed by a three members court, from at least two of the three departments involved in the Master Program. If the supervisor of one TFM is in the court, she/he will be replaced by a reserve, so that the supervisor judgement is not one of the three judgements of the court.

Upon finalizing the public defense of candidates, the court will orally communicate the assessment to the students. Besides the official assessment report will indicate if the TFM document and defense where both in english.

Students may ask for a review of the assessment. Such review will be performed according to the University Official rules for Master Thesis

(http://www.uc3m.es/ss/Satellite/UC3MInstitucional/es/ListadoNormativas/1371206706673/Estudios_de_Postgrado)

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