# uc3m Universidad Carlos III de Madrid

## Professional Internship

Academic Year: (2019 / 2020) Review date: 28-03-2019

Department assigned to the subject: null

Coordinating teacher:

Type: Electives ECTS Credits: 12.0

Year: 4 Semester:

#### **OBJECTIVES**

CB1.Students have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study

CB2. Students can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study

CB3. Students have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues

CB4. Students can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences

CB5. Students have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy

CG1. Students are able to demonstrate knowledge and understanding of concepts in mathematics, statistics and computation and to apply them to solve problems in science and engineering with an ability for analysis and synthesis. CG2. Students are able to formulate in mathematical language problems that arise in science, engineering, economy and other social sciences.

CG3. Students can solve computationally with the help of the most advanced computing tools mathematical models coming from applications in science, engineering, economy and other social sciences.

CG4. Students are able to show that they can analyze and interpret, with help of computer science, the solutions obtained from problems associated to real world mathematical models, discriminating the most relevant behaviours for each application.

CG5.Students can synthesize conclusions obtained from analysis of mathematical models coming from real world applications and they can communicate in verbal and written form in English language, in an clear and convincing way and with a language that is accessible to the general public.

CG6. Students can search and use bibliographic resources, in physical or digital support, as they are needed to state and solve mathematically and computationally applied problems arising in new or unknown environments or with insufficient information.

RA1.To have acquired sufficient knowledge and proved a sufficiently deep comprehension of the basic principles, both theoretical and practical, and methodology of the more important fields in science and technology as to be able to work successfully in them;

RA2.To be able, using arguments, strategies and procedures developed by themselves, to apply their knowledge and abilities to the successful solution of complex technological problems that require creating and innovative thinking; RA3.To be able to search for, collect and interpret relevant information and data to back up their conclusions including, whenever needed, the consideration of any social, scientific and ethical aspects relevant in their field of study; RA4.To be able to successfully manage themselves in the complex situations that might arise in their academic or professional fields of study and that might require the development of novel approaches or solutions; RA5.To be able to communicate, in a precise and clear manner, knowledge, methodologies, ideas, problems and

solutions in their field or specialty to any kind of audience (specialist or not);

RA6. To be aware of their own shortcomings and formative needs in their field of specialty, and to be able to plan and organize their own training with a high degree of independence.

RA7. Students must possess the professional maturity necessary to choose and evaluate their work objectives in a reflexive, creative, self-determined

#### **DESCRIPTION OF CONTENTS: PROGRAMME**

The goal of this course is to allow the student to complete its formation with a period of external internship in a company. External internships reinforce

the formation of the students and provide them a complementary formation with singular value for their professional

The content of this subject is composed for all those activities carried out by students in companies, institutions and organizations, which seek to give

a practical complement (or an academic-practical complement) to the academic learning process when such activity is relevant to the learning process

and their future professional career

#### LEARNING ACTIVITIES AND METHODOLOGY

AF6.EXTERNAL INTERNSHIPS. Internships carried out in external entities, companies and public or private institutions. Subjects with 6 ECTS entail a minimum of 141 hours and subjects with 12 ECTS entail a minimum of 282 hours, 100% on-site

AF7.Preparation of INTERNSHIP report. 9 hours workload (for 6 ECTS) and 18 hours (for 12 ECTS); both 0% on-site MD5.TUTORING FOR EXTERNAL INTERNSHIPS. Individualized academic help and guidance from tutor (individual tutoring sessions) or in-group (group tutoring) for the proper development, orientation and monitoring of internships carried out by students in external entities. The academic tutor may employ the reports from the entity or institution tutor as support.

### ASSESSMENT SYSTEM

SE5.FINAL EVALUATION OF INTERNSHIPS. The evaluation is based on that made by the academic tutor as the internship was carried out, the final report of the tutor from the entity where the internship took place, and the written report prepared and presented by the student. 100% of the evaluation