Professional Internships

Academic Year: (2024 / 2025) **Review date: 21-02-2025**

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: MORENO PELAYO, VALENTIN MIGUEL

Type: Electives ECTS Credits : 6.0

Year : 4 Semester :

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

1. The student must request a place for practices in the period established.
2. Students with an assigned place will be enrolled in the subject even if they do not have a company assigned at the moment.
3. The Orientation & Employment Service (O&E) is responsible for assigning a company, previously validated by the Director of the Degree,

LEARNING OUTCOMES

RA1.3: Awareness of the wider multidisciplinar y context of engineering.
RA2.2: Ability to identify, formulate and solve engineering problems in their field of study; to select and apply relevant methods from established analytical, computational and experimental methods; to recognise the importance of non-technical societal, health and safety, environmental, economic and industrial constraints.
RA4.1: Ability to conduct searches of literature, to consult and to critically use scientific databases and other appropriate sources of information, to carry out simulation and analysis in order to pursue detailed investigations and research of technical issues in their field of study.
RA5.2: Practical skills for solving complex problems, realising complex engineer ing designs and conducting investigations in their field of study.
RA5.3: Understanding of applicable materials, equipment and tools, engineering technologies and processes, and of their limitations in their field of study.
RA5.4: Ability to apply norms of engineering practice in their field of study.
RA5.5: Awareness of non-technical ¿ societal, health and safety, environmental, economic and industrial ¿ implications of engineering practice.
RA7.1: Ability to communicate effectively information, ideas, problems and solutions with engineering community and society at large.
RA7.2: Ability to function effectively in a national and international context, as an individual and as a member of a team and to cooperate effectively with engineers and non-engineers.
RA8.1: Ability to recognise the need for and to engage in independent life-long learning.
RA8.2: Ability to follow developments in science and tech.
CB2: Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.
CB3: Students have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgements which include reflection on relevant social, scientific or ethical issues.
CG6: Communicate verbally and in writing in a bilingual environment: Spanish, English.
CGB2: Understanding and mastery of the basic concepts of fields and waves and electromagnetism, electric circuit theory, electronic circuits, physical princi- ples of semiconductors and logic families, electronic and photonic devices, and their application to the resolution of engineering problems.
CGO1: Ability to conceive, draft, organise, plan, develop and sign projects in the field of computer engineering aimed, in accordance with the knowledge acquired, at the conception, development or operation of computer systems, services and applications.
CGO4: Ability to define, evaluate and select hardware and software platforms for the development and execution of computer systems, services and applications, in accordance with the knowledge acquired.
CGO9: Ability to solve problems with initiative, decision-making, autonomy and creativity. Ability to know how to communicate and convey the knowledge, skills and abilities of the profession of Technical Engineer in Computer Science.

OBJECTIVES

The goal of this subject is to allow the student to complete its formation with a period of external intership in a company. External internships reinforces the formation of the students and provides an aditional laboral formation with singular value for their professional career.

DESCRIPTION OF CONTENTS: PROGRAMME

As content is understood all those activities carried out by students in companies, entities and organizations, which aim to provide a practical complement (or academic-practical complement) to academic training provided that such activity is related to their academic training and their possible career opportunities.

In particular, the training objective of the practice will necessarily include the following aspects:

Tasks to be developed by the student.
Knowledge that the student will acquire.
If the student will participate in design, planning or development tasks.
Within which projects or areas will the practices be framed.
Tools that will be used.

LEARNING ACTIVITIES AND METHODOLOGY

Internship Work 5 ECTS

To develop instrumental competences and many generic ones, as cooperative work team, capacity to apply computer engineering concepts to the company work, work planning and organization, and analysis and synthesis of information. Moreover, the external internship is conceived to develop attitudinal competences.
The internship consists of a company stay to make a real-world project in dependence of a professional company advisor

Evaluation: 1 ECTS

The student must write a report of the internship and make an oral presentation to show the work developed in the company to prove that the internship goals have been fullfilled, and the competences to be acquired have been correctly acquired.

ASSESSMENT SYSTEM

The evaluation system includes the evaluation of the activities carried out during the internship in the company. For this, the following elements will be used:

- Report of the tutor in the company.
  The academic tutor of the UC3M will request this report from the tutor of the company.
- Student report: of the work done during the practice.
  The student will do it according to the instructions published in Aula Global to which he or she will have access once enrolled in the subject.

Both elements will give a 100% rating. The academic tutor at UC3M, based on the above documents, will assess the work according to the form established for this purpose.

Students who do not present the report will be rated as NOT SUBMITTED. The tutor must send the assessment record with this grade.
If the student gives up the practice for which the subject has been validated and enrolled without having reached enough number of hours to pass the subject, he or she will be graded as NOT SUBMITTED because will not be able to present the report.