External Academic Internships

Academic Year: (2021 / 2022) **Review date: 04/06/2021 14:15:03**

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: LINARES LOPEZ, CARLOS

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,

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.

Competences:

CGB2 - Understanding of the basic principles of fields, waves and electromagnestism, theory of electrical circuits, electronical circuits, physical principles of semiconductors and logical families, electronical and photonic devices, and their application for the resolution of engineering tasks.
CG6 - Bilingual verbal and written communication in spanish and english
CGO1 - Ability to conceive, write, organize, plan, develop and sign projects in Computer Engineering which attempt at conceiving, developing, exploting of systems, services and computer applications according to the acquired knowledge
CGO4 - Ability to define, evaluate and select hardware and software platforms for the development and execution of systems, services and computer applications according to the acquired knowledge.
CGO9 - Ability to solve problems with initiative, decision making, autonomy and creativity. Ability to communicate and pass on knowledge, skills and abilities of Computer Engineering
CB2 - To prove skilled enough to apply knowledge to daily work on a professional way, and to have the competences that become evident through the making and defence of arguments and the resolution of problems within the field of study
CB3 - Ability to gather and interpret relevant data (within the field of study) to emit judgments including considerations about issues of social relevance, scientific or ethical

Learning results::

R1 - Knowledge and understanding: to have basic knowledge and understanding of the scientific and technological principles of Computer Engineering, and also specific knowledge of the Science of Computation, Computer Engineering and Information Systems
R3 - Design in Engineering: to be able to devise designs in Engineering according to the knowledge and understanding acquire that fulfill the required specifications in collaboration with other engineers. The designs must encompass devices, processes, methods and objects, and wider specifications that those strictly technical, including social conscience, health and security issues, and a esteem for environmental and commercial issues
R4 Research and innovation: to be able to use appropriate means for making research and to produce innovative contributions in the field of Computer Engineering.
R5 Applications in Engineering: the graduates must be able to apply their knowledge and understanding for solving tasks, supervising research and design devices or process in the field of Computer Science

according to the criteria of cost, quality, security, efficiency and respect for the environmnet and ethical implications. These skills include knowledge, usage and limtations of computer systems, process engineering, computer architecture, computational models, equipment, practical work, technical bibliography and sources of information.
R6 Trasnversal competences: to have the required skills for the practice of engineering in socity. The graduate must have the skills to work effectively both individually or collaborating in a team, showing abilities of communication and coordination of teams. Besides, conscience about the responsibility of practice of Engineering, social impact and environmental must be shown as much as commitment with the professional ethic and regulations of the practice of Engineering. Finally, skills and competences related to the best practices of project management, its tools and risk analysis must be shown as well.

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.