

Degree	Type	Year	Semester
4314660 Computer Engineering	OT	2	1

Contact

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Use of languages

Principal working language: english (eng)

Prerequisites

The main objective of internships is that students can put into practice the knowledge acquired during the courses. It is recommended that the student has finished the course of the first and second semester.

Further,

- A framework agreement between the college and company along with the specific annex where the work plan for the student is defined has to be signed.
- The student must enroll and for that, you must have the agreement already signed and an insurance policy for accidents and liability. The student cannot start the internship before the enrollment.

Objectives and Contextualisation

The development of professional practices will allow students the practical application of the knowledge acquired in their academic training, preparing for professional activities and facilitating their integration into the labor market, will provide the students a view of the business, institutional and labor situation, in the field of computer engineering.

Other objectives are:

- a) To contribute to the integral formation of students, complementing their theoretical and practical lessons.
- b) Facilitate the understanding of the methodology appropriate to the professional reality in which students will have to operate as graduates, contrasting and applying the acquired knowledge.
- c) Develop teamwork capability.
- d) Encouraging the development of the capacity of decision making and the critical spirit of students.

The practice will be, generally, interdisciplinary and can be related to any courses of the studies.

Skills

- Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
- Continue the learning process, to a large extent autonomously
- Define and communicate results, guaranteeing high levels of performance and quality.
- Display a spirit of enterprise and innovation and a wide-ranging vision in the search for new areas to explore in a specific field of the computer engineering profession.
- Integrate and apply the knowledge acquired and solve problems in new or little-known situations within broader (or multidisciplinary) contexts.
- Integrate computer engineering technologies, applications, services and systems to cover a broad range of multidisciplinary contexts.
- Launch, lead and manage manufacturing processes for computer hardware, safeguarding persons and goods and overseeing product quality and certification

- Propose, calculate and design products, processes and installations in all areas of computer engineering.
- Responsibly manage information and knowledge when leading multidisciplinary groups and/or projects.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
- Undertake mathematical modelling, calculation and simulation in technological centres and engineering companies, especially in research, development and innovation tasks in all areas related to computer engineering.
- Undertake strategic planning, preparation, direction, coordination, and technical and financial management in the areas of computer engineering related to: computer systems, applications, services, networks, infrastructures or installations and software development centres or factories, applying criteria of quality and environmental sustainability, in multidisciplinary work environments.

Learning outcomes

1. Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
2. Continue the learning process, to a large extent autonomously
3. Define and communicate results, guaranteeing high levels of performance and quality.
4. Display a spirit of enterprise and innovation and a wide-ranging vision in the search for new areas to explore in a specific field of the computer engineering profession.
5. Integrate and apply the knowledge acquired and solve problems in new or little-known situations within broader (or multidisciplinary) contexts.
6. Launch, lead and manage manufacturing processes for computer hardware, safeguarding persons and goods and overseeing product quality and certification
7. Make a proposal for managing the project/solution within a team (requisites, timing, budget, monitoring, etc.).
8. Propose a solution to a real business problem, using the possibilities of modern technology to meet the needs and wishes of consumers, and provide qualitative and quantitative grounding for this solution.
9. Propose, calculate and design products, processes and installations in all areas of computer engineering.
10. Responsibly manage information and knowledge when leading multidisciplinary groups and/or projects.
11. Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
12. Undertake mathematical modelling, calculation and simulation in technological centres and engineering companies, especially in research, development and innovation tasks in all areas related to computer engineering.

Content

Each of the companies or external centers where you can do the internship have different fields of work and therefore the contents of the internship will depend on the work carried out.

Should draw up a training plan (annex to the specific agreement of cooperation College - Companies) before starting the internships. The plan, agreed with the company or institution, should detail the tasks to be performed, and specify the educational objectives.

This training plan will be validated by the professor responsible for the subject.

The contents of the course, therefore, will be developed by formalizing, for each student, the training project, which will establish:

The details of the training project

Student motivation

The objective of internships

The competencies and learning outcomes that the student must have acquired at the end.

The detailed content of the practices defining the tasks

The follow-up by the tutor appointed by the company

Methodology

Accept and respect the role of the various team members, as well as levels of dependency of the team.
Find information about similar problems and show that reference sources are appropriate to the field of study.
Communicate effectively, orally or in writing, knowledge, results and techniques in both professional environments as to non-experts.
Describe, clearly and concisely, the most important aspects of a problem.
Explain ideas and concepts in an understandable way, adapting the vocabulary to fit to the knowledge of the interlocutor.
Manage time and resources available. Work in an organized way.
Schedule the tasks to be performed to solve a problem.
Make their decisions.
Make decisions, weighing risks and opportunities.
Work cooperatively.
Work independently.

Activities

Title	Hours	ECTS	Learning outcomes
Type: Supervised			
Work at the company	135	5.4	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Type: Autonomous			
Final report	14	0.56	1, 3, 10

Evaluation

The academic tutor will evaluate the practices developed, completing the corresponding final evaluation report.

The final mark will be based on:

- 1.- the report of the tutor of the entity
- 2.- the final report submitted by the student and/or an interview with the academic tutor.

Evaluation activities

Title	Weighting	Hours	ECTS	Learning outcomes
Evaluation report from the company	70%	0	0	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Final report	30%	1	0.04	1, 3, 10

Bibliography

It will be provided by the entity or company.