UAB
Universitat Autònoma de Barcelona

2019/2020

Professional Trainning

Code: 103981
ECTS Credits: 12

Degree	Type	Year	Semester
2500898 Telecommunication Systems Engineering	OT	4	0

Contact

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Use of Languages

Principal working language: catalan (cat)

Some groups entirely in English: No

Some groups entirely in Catalan: Yes

Some groups entirely in Spanish: No

Prerequisites

Those defined in the UAB permanence regime, in the section corresponding to the enrolment progression.

Since this is a fourth year subject, the student must have passed all first year subjects and a total of 120 credits from subjects comprised in the first three years.

Objectives and Contextualisation

The objective of the External Practices is to put students in touch with the professional world, so that they can apply and complement the competences acquired throughout their Degree studies through a training activity supervised by the School and carried out in a company or external institution This training activity allows students to acquire a practical vision of the world of work and professional practice, thus facilitating their employability.

Incompatibility with the TFG in a company
The subject is incompatible with the realization of the TFG (Final Degree Project) in a company. That is, students who want to enroll in the subject may not previously have enjoyed or will be able to enjoy a practice agreement for the realization of the TFG in a company. If the student would like to carry out an internship and at the same time would like this stay to serve as a TFG, then it is necessary to arrange the internship from the very beginning as curricular practices to specifically pursue the TFG, and thus signing a specific agreement to that end. Otherwise, the student will not be able to enrol in the subject, since with by having the agreement for TFG he/she is already enjoying the opportunity to acquire an experience in industry. It is the responsibility of the student to ensure compliance with this rule.

Competences

- Communication
- Develop ethics and professionalism.
- Develop personal attitude.
- Develop personal work habits.
- Develop thinking habits.
- Draft, develop and sign projects in the field of telecommunications engineering that, depending on the speciality, are aimed at the conception, development or exploitation of telecommunication and electronic networks, services and applications.

- Learn new methods and technologies, building on basic technological knowledge, to be able to adapt to new situations.
- Resolve problems with initiative and creativity. Make decisions. Communicate and transmit knowledge, skills and abilities, in awareness of the ethical and professional responsibilities involved in a telecommunications engineers work.

Learning Outcomes

1. Adapt to unforeseen situations.
2. Apply the ideal methodology to develop the problem, combining theoretical developments and simulations as required.
3. Assume social, ethical, professional and legal responsibility, if applicable, derived from professional exercise.
4. Critically evaluate the work done.
5. Develop critical thinking and reasoning.
6. Develop curiosity and creativity.
7. Develop independent learning strategies.
8. Develop systemic thinking.
9. Develop the capacity for analysis and synthesis.
10. Efficiently use ICT for the communication and transmission of ideas and results.
11. Evaluate discrepancies between the objectives and planning of the project, identify the causes of these discrepancies and adopt the necessary corrective measures.
12. Evaluate the results of the project comparing them with similar results from external sources and identifying the new contributions made by the project to current knowledge about the subject.
13. Generate innovative and competitive proposals in professional activity.
14. Identify the specific aims of the project.
15. Make ones own decisions.
16. Manage available time and resources.
17. Plan a project using a Gantt chart.
18. Prevent and solve problems.
19. Seek, pose and expose different alternatives highlighting the importance and risk in relation to the execution of the project.
20. Synthesise the information obtained and ones own knowledge in a structured overview of the state of the art of the projects subject.
21. Work autonomously.
22. Work in complex or uncertain surroundings and with limited resources.

Content

The contents of the internship will be determined by the work plan that will be agreed between the company, the student and the academic tutor. In order to approve the proposed work plan, the contents must be adapted:

- To the profile and the academic situation of the student.
- To the specific competences of the undergraduate degree in telecommunication systems engineering.

Important: Work plans written in a generic manner and without a clear list of tasks with competencies in the field of telecommunication engineering will be rejected.

Methodology

Internship announcements

The person in charge of the subject will be responsible for making public to the students the available internships through the Virtual Campus, as well as the form that must be returned filled to the person in charge of the subject to start processing the corresponding agreement. Students interested in doing internshipts can:

- Request any of these internships distributed by the person in charge of the course through the Virtual Campus,
- Request other internships available through other communication channels,
- Get in touch directly with companies that are looking for students.

In any case, it will be necessary to inform the person in charge of this subject in order to receive the approval for the work plan proposed by the company, and once received, to proceed with the writing of the internship agreement.

Internship duration
The duration of curricular internship agreements must be for a total of 300 hours.

Incompatibility with the extracurricular agreements of the UAB Occupational Service

In order to curricularly recognize the activity carried out by the student in the framework of a internship at a company, it is necessary that at the moment of initiating the internship, the student has in force an agreement. The latter must have been processed through the Internships office of the School of Engineering. Extracurricular agreements managed by the UAB Occupational Service are not valid for the curricular recognition of internships.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Supervised			
Development of the internship	300	12	1, 2, 3, 4, 12, 11, 19, 8, 7, 9, 5, 10, 16, 14, 17, 15, 18, 20, 21, 22

Assessment

The assessment of the internship consists of three elements:

- Report of the internship (60%): document analogous to the report of the final degree project (TFG) where the student must describe in detail the work carried out in the company, indicating objectives, methodology, development, results, and conclusions.
- Report of the tutor at the company (30%), indicating his/her own assessment of the internship.
- Assessment of the academic tutor (10%), based on the periodic follow-up of the student and the evaluation of the results obtained.

The templates for these documents and the documentation presentation calendar will be reported within the space of the subject in the Virtual Campus.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Assessment of the academic tutor	10%	0	0	2, 3, 12, 11, 6, 13

Internship report	60%	0	0	2, 4, 12, 11, 19, 9, 10, 14, 17, 20
Report of the tutor at the company/institution	30%	0	0	1, 2, 4, 12, 11, 19, 8, 7, 9, 5, 10, 16, 14, 17, 15, 18, 20, 21, 22

Bibliography

In each case, the student's tutor at the company / external institution will propose the adequate bibliography depending on the work to be carried out.