

Academic Year/course: 2022/23

66393 - Internships 1

Syllabus Information

Academic Year: 2022/23

Subject: 66393 - Internships 1

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura

Degree: 636 - Master's in Renewable Energies and Energy Efficiency

ECTS: 3.0

Year:

Semester: Second semester

Subject Type: Optional

Module:

1. General information

1.1. Aims of the course

By carrying out the internship, the following objectives are to be achieved:

- Contribute to the comprehensive training of students by complementing their theoretical and practical learning.
- Facilitate knowledge of the work methodology appropriate to the professional reality in which students will have to operate, contrast and apply the acquired knowledge.
- Encourage the development of technical, methodological, personal and participatory skills.
- Obtain practical experience that facilitates entry into the job market and improves future employability.
- Favour the values ??of innovation, creativity and entrepreneurship.

These approaches and objectives are aligned with some of the **Sustainable Development Goals, SDG**, of the 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>) and certain specific goals, in such a way that the acquisition of learning outcomes of the subject provides training and competence to the student to contribute to some extent to their achievement:

Goal 7: Affordable and clean energy

- Target 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services
- Target 7.2 By 2030, considerably increase the proportion of renewable energy in all energy sources
- Target 7.3 By 2030, double the global rate of improvement in energy efficiency

Goal 9: Industry, Innovation and infrastructure.

- Target 9.4. By 2030, modernize infrastructure and convert industries to be sustainable, using resources more efficiently and promoting the adoption of clean and environmentally sound technologies and industrial processes, and ensuring that all countries take action according to their capabilities respective.

Goal 13. Climate action

- Target 13.3 Improve education, awareness and human and institutional capacity regarding climate change mitigation, adaptation, reduction of its effects and early warning

1.2. Context and importance of this course in the degree

Internship constitutes a training activity included in the degree's study plan within the optional modules. They allow the student to put into practice and advance in the generic and specific competencies acquired in the Master's subjects in a real and applied environment, thus developing instrumental, interpersonal and systemic skills that can significantly support their future capacity for professional performance, personal development and, ultimately, an adequate integration in a labour market.

1.3. Recommendations to take this course

The student must consult the information and regulations on internship available in the following link: <http://eina.unizar.es>

2. Learning goals

2.1. Competences

BASIC SKILLS

CB7.- That students know how to apply the knowledge acquired and their ability to solve problems in new or little-known environments within broader (or multidisciplinary) contexts related to their study area.

CB8.- That students can integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on the social and ethical responsibilities linked to applying their knowledge and judgments.

CB9.- That students know how to communicate their conclusions and the knowledge and ultimate reasons that support them to specialized and non-specialized audiences clearly and unambiguously.

CB10.- That students have the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.

GENERAL COMPETENCES

CG1.- Carry out research, development and innovation in products, processes and methods concerning energy efficiency.

CG2.- Carry out research, development and innovation in products, processes and methods concerning renewable energies.

CG5.- Apply knowledge of advanced sciences and technologies to the professional or investigative practice of efficiency.

CG6.- Identify current legislation and regulations applicable to the renewable energy and energy efficiency sector.

CG8.- Develop the ability to advise on the best way or channel to optimize energy resources concerning renewable energies.

CG9.- Solve complex problems in the field of energy efficiency and sustainability.

2.2. Learning goals

The student must be able to:

- Upon completion of this subject, the student will meet the following learning outcomes:
- Be able to apply the theoretical knowledge acquired, putting it into practice in the development of work outside the educational field, supervised, directed and linked to the exercise of the activity in an appropriate professional environment (public or private).
- Being able to fulfil the commitments acquired with the collaborating entity and the University concerning external internships.
- Being able to write, adequately and systematically, a report of activities (final report) in which the proposed objectives and those achieved are reflected, as well as a detailed description of the activities carried out.
- Being able to expose the final report before the tutor professor and to maintain, where appropriate, a debate in which, among other issues, the contents, methodology and clarity are addressed.
- Be able to establish the relationship between the contents of the degree and the tasks carried out, taking into account both the general and specific skills as well as the skills and attitudes developed.
- Being able to conduct a reasoned evaluation of the activities and related processes and formulate proposals for improvement.
- Know and demonstrate the ability to carry out professional tasks in the degree field.
- Know and demonstrate the ability to carry out research tasks in the degree field.

2.3. Importance of learning goals

The learning results achieved through internship allow the student jointly apply the competencies and skills acquired in the various subjects of the curriculum, conferring, in turn, the possibility of initiating activities, in a tutored way, in a scenario similar to the one they will find in a future work environment.

3. Assessment (1st and 2nd call)

3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The students must show that they have achieved the learning results expected in the training program through the following evaluation activities that must be recorded, from which the academic tutor will carry out the evaluation, as indicated in this section:

- Meetings between the tutor and the student.

- Interim report (for internship of 6 or more credits) made and delivered at the equator thereof, which collects the assessment of the development of the Training Project.
- The final report of the Internship.
- The exposition and defence of the memory before the academic tutor. It will have a maximum duration of 15 minutes, in the function of the contents and objectives, and may continue in a discussion with the tutor on any related aspect.
- Assessment report of the tutor in the collaborating entity (format provided by UNIVERSA).
- Assessment questionnaire completed by the student on the internship carried out (following the format provided by UNIVERSA).
- Other activities that, where appropriate, the academic tutor considers necessary.

The Final Report must include, among others, the following aspects:

- Student personal data
- Collaborating entity where the internship is carried out
- A detailed description of the tasks developed and departments of the entity to which the student was assigned.
- Assessment of the tasks carried out with the knowledge and skills acquired concerning the university studies.
- List of problems raised and the procedure followed for their resolution.
- Identification of the contributions that, in the matter of learning, have resulted from the internship.
- Evaluation of internship and suggestions for improvement.

The academic tutor will assign the grade, based on the evaluation activities indicated in the previous section, in the final evaluation report, which will also reflect the assessment of the following sections:

1. Assessment of the tutor in the collaborating entity, 50%
2. Degree of achievement of the objectives of the internship training project, 25%
3. Content and quality of the final report of the internship and its presentation and defence. 25%

Grading will be carried out using the same scale as in the rest of the subjects, according to the academic year in which students are enrolled.

If the student does not provide all the documentation for internship evaluation before September 30, they will need to renew their enrolment and will be evaluated the following year.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The learning process constitutes an active method based on the integration of the student themselves in the collaborating entity, in which they assume the initiative of their training through personal research, direct contact with the reality and experiences of the working group in which it is integrated. All this encourages:

- Strong motivation for the student.
- An increase in difficulty
- A bridge is created between theoretical abstraction and practical reality
- Facilitates auto-detection of errors
- Facilitates the student's autonomy
- Develops the acquisition of information and research skills and abilities.

4.2. Learning tasks

The learning activities that comprise the performance of the internship are the following:

- Activities developed during the Internship (work day adapted to the circumstances of the collaborating entity and the student)
- Follow-up by the tutor in the collaborating entity
- Personalized tutoring sessions with the academic tutor
- Autonomous work of the student: elaboration of the reports and the presentation preparation

4.3. Syllabus

The professional internship program will be established with the prior agreement with the collaborating entity and the academic tutor and will remain embodied in the Training Project following the provisions of section 3.2.

In application to current regulations, the internship assessment will be done at 25 hours per credit, up to a maximum of 500

hours.

4.4. Course planning and calendar

The distribution of workloads will be specified in each case by mutual agreement between the collaborating entity and the student, and, as a guide, its breakdown will include the following activities:

- Activities carried out in the collaborating entity
- Personalized tutoring sessions, student-academic tutor.
- Report exposition and defence evaluation tests,
- Autonomous work of the student for the elaboration of the intermediate report, final report, and preparation of the presentation

The collaborating entity and the student will specify the schedule during the Internship with the agreement of the academic tutor and based on the training project.

Students interested in carrying out academic internships are recommended to contact the professor to whom they wish to propose the functions of the academic tutor or, if they do not have a preference, contact the coordinator for guidance on the assignment of an academic tutor.

The content and objectives of the Internship, associated with the skills and competencies conferred by the degree, materialize in the Training Project agreed with the academic tutor and which is part of the documentary dossier of the Internship.

In addition, they must go to the Orientation and Employment service, UNIVERSA, of the University of Zaragoza <http://www.unizar.es/universa/>, which will take care of the necessary administrative procedures to establish the relationship between the student and the entity where the internships as well as the entire administrative process related to them.

During the Internship, the student must perform the functions assigned under the supervision of the collaborating entity tutor, follow the instructions of the academic tutor for its monitoring and evaluation, and notify any incident.

Finally, at the end of the internship, and within the deadlines established for this purpose, prepare, deliver, present and defend a final report on them.