COURSE DATA

DATA SUBJECT

Code: 47095
Name: Internship
Cycle: Master's Degree
ECTS Credits: 7
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
2285 - Máster Universitario en Contaminación Ambiental y Ecotoxicología	Facultat de Ciències Biològiques	1	Indefinite (Individuals)

SUBJECT-MATTER

Degree	Subject-matter	Character
2285 - Máster Universitario en Contaminación Ambiental y Ecotoxicología	Prácticas Académicas Externas	INTERNSHIPS

COORDINATION

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SUMMARY

Work placements are a fundamental part of the learning process for students on the Master's Degree in Environmental Pollution and Ecotoxicology, given its professionalising vision. Internships in companies are an opportunity for students to make contact with the productive fabric, and are perhaps the first contact students have with the world of work.

The main objectives of external placements are

1. For the student to come into contact with the labour market, whether in private companies, public companies or administrations, or teaching and/or research centres. The latter may be outside the university itself, or integrated into it within the framework of agreements or contracts between the university and companies or administrations. This contact, if it takes place, facilitates the employability of the graduate, either in the company where the internship was carried out or in other companies/entities that value the work experience.
2. To value and know how to apply in the workplace the fundamental rights and equality between men and women, respect and promotion of human rights and the principles of

universal accessibility and design for all, and respect for democratic values.
3. To be able to apply the knowledge, skills and abilities acquired during their training in an environment other than the academic one, critically assessing and appreciating the priorities, pressures and external and internal conditioning factors that determine the daily functioning of a company, administration, or training and/or research centre .
4. To value and assimilate the importance of teamwork, assuming the role assigned to them within it and trying to play their role in accordance with the rules, procedures and general culture of their work centre, and in accordance with the deontological principles of the profession.
5. To be able to communicate effectively with their tutors, both in the company or administration and in the university, as well as with their colleagues in the workplace, so that they can establish the specific training objectives of the placement and achieve them effectively.

The internship will culminate with the completion of a report describing the work carried out during the time spent on the practicum, which will be assessed by the person in charge of the Master's internship.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

No registration restrictions with other subjects in the syllabus have been specified.

COMPETENCES / LEARNING OUTCOMES

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Acquire the capacity for autonomous and organised learning and for adapting to new situations.

Acquire the skills to convey ideas, problems and solutions and to communicate them to both professional and non-professional audiences.

Act autonomously in learning, make informed decisions in different contexts, issue judgements based on experimentation and analysis and transfer knowledge to new situations.

Assess the risks of pollutants in ecosystems and their biodiversity.

Be capable of producing a histopathological diagnosis in an environmental context.

Collaborate effectively in work teams, taking on responsibilities and leadership roles and contributing to collective improvement and development.

Contribute to the design, development and implementation of solutions that respond to social demands,

considering the Sustainable Development Goals as a reference.

Create georeferenced databases of pollutants, apply geostatistics and produce thematic maps. Use remote sensing techniques in environmental studies.

Demonstrate critical and self-critical reasoning in the field of the degree, considering aspects such as professional ethics, moral value and the social implications of the different activities carried out.

Design and conduct studies and tests to identify and assess endocrine disruption caused by environmental pollutants.

Design ecotoxicity bioassays in various environmental matrices.

Design specific indicators for a particular environmental risk.

Develop and implement programmes and projects to prevent, control and mitigate environmental pollution.

Develop the ability to work in multidisciplinary teams and to cooperate effectively.

Develop the capacity for analysis, synthesis and critical thinking in applying the scientific method.

Diagnose environmental problems.

Evaluate the quality of water and soil.

Know and understand, within the area of the degree, inequalities based on sex and gender in society; integrate different needs and preferences based on sex and gender into the design of solutions and problem-solving.

Know how to identify the effects of environmental pollutants on reproductive function in animals, including sexual function, gametogenesis, fertilisation and early embryonic development.

Know the animal models used for studying human diseases in relation to environmental pollution.

Know the histology of species used as bioindicators, sentinels or experimental models in an environmental context.

Know the standards and legislation relating to environmental pollution.

Learn how to write scientific articles in the fields of environmental pollution and ecotoxicology.

Understand the effects of pollutants on animal and plant physiology.

Understand the natural world as a product of evolution and its vulnerability to human influence.

Use computer tools, statistical methods and data simulation appropriately, applying software and statistics in ecotoxicology and in issues arising from environmental pollution.

Use different bibliographic sources and biological databases.

Use indicators of environmental risks and health-related damage.

DESCRIPTION OF CONTENTS

The internship profile is very broad, covering both the private and public sector, covering all fields of interest related to environmental pollution and ecotoxicology.

The external placements focus on the practical application of the different contents taught in the master's degree, which can be grouped into the following professional sectors:

1. Environmental pollution assessment and control sector.

Area or fields of professional action: Control and monitoring of environmental pollution (air, soil, water and biota), Assessment of ecotoxicological effects on the environment, Technical assistance in environmental studies, expertise and assessment of environmental damage.

Competences or learning outcomes: Those indicated as general competences and learning outcomes of the subject Work placement in a company.

Company, institution or entity tutor profile: Professional with experience in handling laboratory techniques and knowledge in specific areas of the environment, microbiology, ecotoxicology. Experts in the evaluation of the water pollution by means of biological indicators. Experts in the drafting of environmental expert reports. Environmental consultancy and advisory firms.

2. Regulatory sector

Area(s) of professional activity: Evaluation and drafting of registration dossiers for European safety agencies. EFSA (European Food Safety Agency), ECHA (European Chemicals Agency), European Environment Agency (EEA), Joint Research Centers (JRC).

Competences or learning outcomes: Those indicated as general competences and learning outcomes of the subject Work placement.

Company, institution or entity tutor profile: Technicians of the European safety agencies, Technicians of the national offices with competences in the application of directives.

3. R+D+i sector

Area(s) of professional activity: Development of research into the effects, processes and risks of environmental pollutants. Development of new pollution assessment techniques, generation of knowledge related to environmental restoration, (eco)toxicological effects of emerging pollutants, development of decontamination techniques.

Competences or learning outcomes: Those indicated as general competences and learning outcomes of the subject Work placement in a company.

Company, institution or entity tutor profile: Scientists and technologists from public research centres (Universities, CSIC, OPIs), Technical and scientific directors of private companies intensive in R&D&I, Directors and managers of technology centres, Heads of Science Parks.

4. Public Administration Sector

Area or fields of professional activity: Inspection and control in the environmental field in public administrations (City Councils, Associations, Provincial Councils, Regional Ministries, Autonomous Organisations and competent Ministries).

Competences or learning outcomes: Those indicated as general competences and learning outcomes of the subject Work placement in a company.

Company, institution or entity tutor profile: Technicians and people in charge of public administrations: City councils, associations of municipalities, districts, regional councils, autonomous bodies and competent ministries.

5. Education, dissemination and development cooperation sector.

Area or fields of professional activity: Secondary education, university and vocational training, areas related to scientific knowledge and the environment, interpretation centres, nature classrooms, managers of national and natural parks, biosphere reserves, NGODs and the Spanish Agency for International Cooperation (AECID).

Competences or learning outcomes: Those indicated as general competences and learning outcomes of the subject Work placement in a company.

Company/institution/entity tutor profile: Teacher with experience in teaching biology or life sciences, at secondary or university level, Directors of National Parks, Directors of Natural Parks, Heads of nature classrooms, AECID technicians and NGDOs.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at the internship centre	68,00
Attendance at supplementary activities	0,00
Monitoring and tutoring of internships	2,00
Total hours	**70,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Independent study and work	15,00
Preparation of supplementary reports	20,00
Preparation of the internship report and evaluation of the internship	30,00
Total hours	**65,00**

TEACHING METHODOLOGY

External internships. These are based on supervised work placements in a company or organisation and the preparation of a report on the activities.

External placements will be carried out in companies or in research groups in universities or research centres. The students will carry out functions entrusted by the company tutor and which lead to completing their training, in this case, practical training related to the objective of the Master's Degree.

The Master's management, through the internship manager, will monitor external internships by consulting students and assessing the internship report.

In relation to TFM, possible topics within the experimental field will be proposed by the Master's teaching staff so that students can select those in which they are interested.

The academic tutor will monitor the different phases of the work placement.

The regulations for the preparation of the TFM report will be posted on the Master's website.

EVALUATION

The assessment of the work placement will be based on the activities assessed by the Company Tutor during the work placement (report from the Company Tutor) and on the written report of the work placement that the student must present at the end of the work placement (report from the University Tutor).

REFERENCES

- Rules for the external placement report (available on the Master's website).
- Assessment rules for the external placement report (available on the Master's website).