

**COURSE DATA****DATA SUBJECT**

**Code:** 46819  
**Name:** Quality Control  
**Cycle:** Master's Degree  
**ECTS Credits:** 3  
**Academic year:** 2025-26

**STUDY (S)**

| Degree   | Center             | Acad. year | Period |
|--|--------------------|------------|--------|
| 2273 - Master's Degree in Environmental Radiation Protection | Facultat de Física | 1          | Annual |

**SUBJECT-MATTER**

| Degree   | Subject-matter     | Character  |
|--|--------------------|------------|
| 2273 - Master's Degree in Environmental Radiation Protection | Control de calidad | COMPULSORY |

**COORDINATION****SUMMARY****PREVIOUS KNOWLEDGE****RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

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

**OTHER REQUIREMENTS****COMPETENCES / LEARNING OUTCOMES**

-

Be able to apply the appropriate scientific concepts and data processing tools in the diagnosis and solution of problems arising from environmental radioactivity.

Be able to communicate conclusions, and the knowledge and rationale underpinning these, concerning ionising radiation, its use and effects on the environment, to specialist and non-specialist audiences, clearly and unambiguously.



Be able to integrate knowledge of the sources of radioactivity, its interaction with matter and its effects on living organisms and to handle the complexity of formulating judgements with incomplete or limited information, but that includes reflections on the social and ethical responsibilities linked to the application of knowledge and judgements.

Be able to prepare, present and defend, before a university examining board, an original work carried out individually consisting of a comprehensive study or project in the field of environmental radiological protection, synthesising the skills acquired, adopting advances and novelties in this field, and contributing innovative ideas.

Characterise and understand the different basic processes that act and regulate the distribution and fate of radionuclides in the water, soil and atmosphere.

Demonstrate knowledge and understanding of ionising radiations that provide a basis or opportunity to be original in developing or applying ideas, often in a research context in the field of environmental radioactivity.

Have basic skills in instrumentation methods and data processing techniques for determining relevant quantities for the analysis of problems arising from environmental radioactivity.

Have the learning skills that allow students to continue to study in a manner that may be largely self-directed or autonomous.

Identify, state and comprehensively analyse the problems arising from environmental radioactivity.

Identify and apply technologies, tools and techniques in the field of environmental radiation protection.

Know how to apply knowledge and problem-solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to the field of study.

Propose practical solutions, according to applicable environmental legislation, for suitable environmental management tools and assessment of environmental radiological risks.

## DESCRIPTION OF CONTENTS

## WORKLOAD

### PRESENCIAL ACTIVITIES

| Activity           | Hours        |
|--------------------|--------------|
| Theory             | 30,00        |
| <b>Total hours</b> | <b>30,00</b> |

### NON PRESENCIAL ACTIVITIES

| Activity                       | Hours |
|--------------------------------|-------|
| Attendance at other activities | 0,00  |



|                                       |             |
|---------------------------------------|-------------|
| Individual or group project           | 0,00        |
| Independent study and work            | 0,00        |
| Preparation of lessons                | 0,00        |
| Preparation for assessment activities | 0,00        |
| Resolution of case studies            | 0,00        |
| <b>Total hours</b>                    | <b>0,00</b> |

## TEACHING METHODOLOGY

## EVALUATION

## REFERENCES