

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

Code: 46817
Name: Radiological Evaluation and Protection in Industries
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	Evaluación y protección radiológica en industrias E	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****2273 - Master's Degree in Environmental Radiation Protection**

Assess and apply radiation protection measures to improve environmental quality and health.

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 develop projects in the field of environmental radiation protection.

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.

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 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.

Integrate radiological protection into the environmental and sustainable development framework.

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
Total hours	30,00

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
Total hours	0,00

TEACHING METHODOLOGY

EVALUATION

REFERENCES