

**COURSE DATA****DATA SUBJECT****Code:** 45006**Name:** Gestión de la calidad de las aguas superficiales en base a modelos**Cycle:** Master's Degree**ECTS Credits:** 3**Academic year:** 2025-26**STUDY (S)**

Degree	Center	Acad. year	Period
2250 - Master's Degree in Environmental Engineering	Escola Tècnica Superior d'Enginyeria	2	First quarter

**SUBJECT-MATTER**

Degree	Subject-matter	Character
2250 - Master's Degree in Environmental Engineering	Gestión de la calidad de las aguas superficiales en base a modelos	ELECTIVES

**COORDINATION**

MARTI ORTEGA NURIA

**SUMMARY**

The University responsible for this subject is the Universitat Politècnica de València (UPV). For this reason, the teaching guide can be found on the website of the Universitat Politècnica de València (UPV):

<https://gdocu.upv.es/alfresco/service/api/internal/shared/node/content/l856e58gTnmaGxQKFGhyAQ?a=true.pdf>

**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

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Apply tools for environmental assessment and management including environmental impact assessment and environmental risk assessment.

Carry out a comprehensive assessment of environmental water quality.

Characterise emissions to water.

Design, calculate and select engineering solutions to environmental problems, comparing alternatives that include emerging technologies under criteria of technical, social, economic and environmental viability.

Develop and apply mathematical models for the simulation, optimisation or control of processes in the field of environmental engineering.

Develop environmental solutions under the principles of circular economy and the sustainable development goals.

Identify, formulate and solve complex environmental engineering problems by applying engineering, scientific and mathematical principles.

Implement measures for preventing pollution and recovering, protecting and improving environmental quality.

Learn and apply new knowledge, using appropriate learning strategies.

Recognise the ethical and professional responsibilities of environmental engineering and make informed judgements considering the impact of engineering solutions in global, economic, environmental and social contexts.

Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.

Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.

Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.

Students should demonstrate self-directed learning skills for continued academic growth.

Students should possess and understand foundational knowledge that enables original thinking and research in the field.

**DESCRIPTION OF CONTENTS****WORKLOAD****PRESENCIAL ACTIVITIES**

<b>Activity</b>	<b>Hours</b>
Theory	6,00
Theoretical and practical classes	2,00
Computer classroom practice	20,00
Classroom practices	2,00
<b>Total hours</b>	<b>30,00</b>

**NON PRESENCIAL ACTIVITIES**

<b>Activity</b>	<b>Hours</b>
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**