

IKASTURTEA/ ACADEMIC YEAR 2026/27

IKASGAIA/SUBJECT:	SCIENTIFIC AND TECHNOLOGICAL SURVEILLANCE	KURTSOA/COURSE:	4th
MODULUA/MODULE:	Innovation	KOKAPENA/LOCATION:	8th semester
ESPARRUA/SCOPE:	---	IRAUPENA/DURATION:	150 h
IZAERA/CHARACTER:	Compulsory	KREDITUAK/CREDITS:	6 ECTS
KODEA/CODE:	208479	HIZKUNTZA/LANGUAGE:	English
PLANA/PLAN:	2024	IRAKASLEA/TEACHER:	Roberto Altzerreka Etxeberria
AIPAMENA/MENTION:	---		

HELBURUA/AIM:	To carry out a synthesis project on a technical or scientific topic that addresses questions raised by companies. It may also contribute to a research project.
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IKAS-PROZESUAREN EMAITZAK/LEARNING OUTCOMES

RC1 - Develop engineering-specific habits and skills by employing abilities such as systems thinking, initiative, creativity, collaboration, communication, and ethical considerations. TYPE: Competencies

RC8 - Operate and manage various business areas with a comprehensive view of the organization and its activities, considering opportunities for innovation and improvement. TYPE: Competencies

RCO6 - Understand scientific-analytical procedures and techniques for improving or developing new products, processes, or services for patentability, production, or commercialization. TYPE: Knowledge or contents

RCO8 - Acquire technical and scientific knowledge in the development, improvement, and innovation of processes and products when facing real business challenges. TYPE: Knowledge or contents

RHE1 - Comprehend technical information in multiple languages within the field of engineering innovation, aiming to adapt to new situations and effectively communicate and transmit knowledge. TYPE: Skills or abilities

RHE2 - Manage change and innovation by adapting to needs and demands, leading and initiating new situations, and implementing actions that facilitate the involvement of all personnel, analyzing the medium-term impact of one's actions and decisions. TYPE: Skills or abilities

RHE5 - Apply innovation engineering knowledge to proactively contribute to the organization's strategy, adopting an innovative business vision committed to environmental sustainability and gender equity. TYPE: Skills or abilities

RHT5 - Create contexts for innovation by leveraging opportunities presented by the innovation system. TYPE: Skills or abilities

EDUKIAK/SYLLABUS

1. Territorial Competitiveness Framework. Dimensions of competitiveness and innovation. Indicator-based analysis of territorial competitiveness.
2. Science, Technology and Innovation Policies. Evolution of innovation policies in the Basque Country. The Science, Technology and Innovation Plan 2030 (PCTI 2030) and the Basque Science, Technology and Innovation Network.
3. Sustainable Development Goals (SDGs), future trends and the impact of emerging technologies.
4. Introduction to Scientific and Technological Surveillance. Definition and operating framework. Identification of information sources: Where should information be sought? Definition of alerts: What information should be monitored?
5. Scientific and Technological Surveillance Tools. Introduction to basic free tools, including Feedly. Identification and management of information sources.
6. Information Alerts. Google Alerts. Creation and configuration of alerts. Use of logical and Boolean operators.
7. Advanced Search Techniques
8. Academic Repositories and Search Engines (Google Scholar, arXiv...)
9. Creation and Dissemination of Intelligence Newsletter
10. Poster Preparation and Presentation

IRAKASKUNTZA MOTA/TYPE OF TEACHING

	M	CP	PL	PO	SP	D
In person (hours)	20	7,5	0	0	32,5	0

Personal work (hours) 20 12,5 0 0 57,5 0

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M: Master class / CP: Classroom problem-solving class / PL: Laboratory practices / PO: Computer practices / SP: Project seminars / D: Dual

BALIABIDE DIDAKTIKOAK/TEACHING METHODS

- X Explanatory and/or demonstrative sessions by the teacher.
 - X Exercises carried out in the classroom with the help of the teacher.
 - X Practical application through exercises, simulations, and experimentation, either individually or in groups.
- An integrative case study representative of the skills to be acquired through the module.

BIBLIOGRAFIA/LITERATURE

- Lecture notes for the Innovation Projects course.
- Performance specifications.
- Depending on the project to be carried out.

EBALUAZIO METODO ETA IRIZPIDEAK/EVALUATION METHODS AND CRITERIA

The assessment tests and activities for this subject will be carried out in accordance with the principles of academic integrity, honesty, and ethical behaviour established in the regulations of the Elgoibar Dual Engineering School and the EHU. Upon entering the University, students signed the Declaration of Commitment to Ethical Behaviour and Academic Honesty, pledging not to engage in plagiarism, academic fraud, or the use of unauthorized materials or devices (including artificial intelligence tools when not expressly permitted) in academic tests and assignments. Failure to comply with these obligations may lead to the academic and disciplinary consequences provided for in the university regulations in force.

- X Continuous Evaluation System

X Final Evaluation System**OHIKO DEIALDIA/ ORDINARY CALL****Continuous assessment criteria:**

- 0 % Written and/or oral test
- 0 % Completion and/or reporting of internships
- 100 % Report/Deliverables/Oral Presentations/Projects
- 0 % Carrying out activities and/or projects in the dual entity

Argibideak/Clarifications:

- Continuous assessment will be based on five components:
 - Group surveillance system: 20%
 - Individual surveillance system: 30%
 - Presentation of the group project content: 30%
 - Infographic: 20%
- In the event of a fail, the assignments/projects must be resubmitted in accordance with the guidance provided.
- To not attend all oral presentations, except for duly justified reasons, will result in a mark of 0 for that assessment component. If this component is failed, the student will be required to complete an additional assignment on the projects carried out by all the groups in the course, to be agreed with the lecturer.
- To pass the course, students must obtain a minimum mark of 5 out of 10 in each and every assessment component.

Final assessment criteria:

50 % Written and/or oral test

0 % Completion and/or reporting of internships

50 % Report/Deliverables/Oral Presentations/Projects

0 % Carrying out activities and/or projects in the dual entity

- The final assessment will be based on three components:
 - Individual surveillance system: 30%
 - Infographic: 20%
 - Exam: 50%
- In the event of a fail, the assignments/projects must be resubmitted in accordance with the guidance provided.
- To pass the course, students must obtain a minimum mark of 5 out of 10 in each and every assessment component.

EZOHIKO DEIALDIA/ CALLEXTRAORDINARY

Argibideak/Clarifications:

The assessment component that has not been passed must be retaken in accordance with the guidelines set out above.