UAB
Universitat Autònoma de Barcelona

Social Innovation

Code: 106598
ECTS Credits: 6

2025/2026

Degree	Type	Year
Artificial Intelligence	OB	3

Contact

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Teachers

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Teaching groups languages

You can view this information at the end of this document.

Prerequisites

No pre-requisits are needed.

Objectives and Contextualisation

The subject's main objective is to introduce the basic concepts of social innovation, as a motor of progress, in the broadest sense. Students will be provided with the necessary tools and skills to direct and develop innovation and entrepreneurship problems, based on the valorization of AI technologies to solve real problems.

Innovation will be studied from the point of view of its social impact, both in the idea, development and commercialization of disruptive products and services based on AI, as well as in the organization and efficiency of value chains and ecosystems. Multi-actor collaboration models will be studied, in the connection of the multiple-helix (academy, business, public administration and citizenship, from the vision of territory and sustainability).

On the other hand, the potential of AI as a factor of change in social dynamics will be studied. Given the social repercussion that is analyzed, special attention will be paid to the role of citizens in this type of process, explicitly including co-creation instruments, citizen science and living labs. This course will offer a panoramic vision of the concepts and theories that allow us to understand the social repercussions of technological innovation processes in a broad sense, and of AI, in a specific way tools for co-creation of impactul solutions for/with and by the society will be provided

Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Act within the field of knowledge by evaluating the social, economic and environmental impact beforehand.
- Communicate effectively, both orally and in writing, adequately using the necessary communicative resources and adapting to the characteristics of the situation and the audience.
- Develop critical thinking to analyse alternatives and proposals, both one's own and those of others, in a well-founded and argued manner.
- Identify, analyse and evaluate the ethical and social impact, the human and cultural context, and the legal implications of the development of artificial intelligence and data manipulation applications in different fields.
- Know and apply the innovation, technology transfer and citizen participation processes in the field of artificial intelligence.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.

Learning Outcomes

1. Analyse the sustainability indicators of academic and professional activities in the field by incorporating the social, economic and environmental factors at play.
2. Communicate effectively, both orally and in writing, adequately using the necessary communicative resources and adapting to the characteristics of the situation and the audience.
3. Critically analyse the principles, values and procedures that govern the practice of the profession.
4. Design citizen participation processes that comply with the current legal and operational framework.
5. Develop critical thinking to analyse alternatives and proposals, both one's own and those of others, in a well-founded and argued manner.
6. Identify innovative solutions using open innovation tools.
7. Identify the social, economic and environmental implications of academic and professional activities for the field of knowledge.
8. Manage innovation ecosystems that involve the different actors in the quadruple helix framework.
9. Organise and lead design thinking sessions with a diverse group of actors.
10. Propose viable projects and actions that enhance social, economic and environmental benefits.
11. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
12. Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
13. Value and understand social knowledge derived from citizen science.

Content

1. Open Innovation and social impact.
2. Science / technology / society framework. Technological innovation and social change,
3. Democratization of AI technology
4. Open innovation 2.0: quadruple helix, "social readiness level" (SRL), innovation ecosystems, public policies, the European model for AI.
5. Citizen participation processes.
6. Open innovation structures and tools: living labs.
7. Citizen Science for the generation of knowledge.
8. Science shops, Fab labs, DIY and collaborative software development platforms.
9. Creation, management, storage, annotation of data generated by the individual. Digital common good.
10. Innovative design of human-machine interaction. User experience.

11. Evidence-based policy recommendations: regulatory sandboxes

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Analisys of the case studies	10	0.4	3, 1, 7, 11
Open debates with experts	10	0.4	3, 1, 2, 9, 12, 13
Project development	18	0.72	2, 5, 4, 8, 10
Theoretical context	15	0.6	3, 1, 5, 4, 7, 6, 11, 13
Type: Supervised			
Impact analysis of the innovation process	32	1.28	3, 1, 5, 7, 6, 10, 12, 11, 13
Type: Autonomous			
Development of the case studies	37	1.48	1, 4, 8, 6, 10, 12, 11
Individual study	20	0.8	3, 1, 5, 4, 7, 6, 10, 11, 13

The students will work from a methodology based on challenges, and will be carried out in work groups.

The groups will use the projects developed in other subjects of the degree as a work case, in order to develop the social impact of the results obtained.

From this point of view, Social Innovation complements the technical development of AI with a responsible approach to the identification of its potential social impacts.

The project developed by the groups will have as a deliverable a document within one of the following options (other options can be proposed by the groups):

1. A piece of software, art installation or exhibition.
2. A platform for a Citizen Science project.
3. A living lab proposal for the co-creation process of an application.
4. A scientific article on the expected social impact of the proposed technology.

To carry out the deliverable, the groups will be able to interact with students from other degrees such as Smart Cities or Computer Engineering.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Final deliverable	70%	4	0.16	2, 5, 4, 8, 6, 9, 10, 12
State of the art	30%	4	0.16	3, 1, 5, 7, 6, 12, 11, 13

There will be 2 deliverables for the evaluation:

1. Article deliveries the state of the art (SoA).
2. Delivery of the final deliverable (FI)

The final grade will be the result of applying the following formula:

FINAL SCORE = SoA*0.30 + PI*0.70

To pass, it will be necessary for the evaluation of each of the parts to exceed the minimum required (5) and for the total evaluation to exceed 5 points. In case of not passing the subject, the numerical grade of the file will be the lowest value between 4.5 and the weighted average of the grades. There is no single evaluation option.

Positive contributions in discussions will round the decimal places in the grade up. To qualify for the Honors Degree, it is necessary to have had a participatory attitude in class discussions. The honors resulting from calculating five percent or fraction of the students enrolled in all the teaching groups of the subject will be awarded globally. They can only be awarded to students who have obtained a final grade equal to or greater than 9.

In case of suspending any of the deliveries, you will have the opportunity to recover the partial grade by re-sending the corrected document before the day determined by the professor. Repeating students will be able to validate the parts approved in previous years.

The non-presentation in the final exam (EF) implies a "Not Evaluable" in the minutes.

Finally, there will be an extraordinary test that will allow students to obtain a pass in the Theory part in case they have failed the final exam (E), which will allow the grade of pass to be granted.

All exams will be adjusted according to the School calendar.

The dates of continuous evaluation and delivery of work will be published on the Caronte website (http://caronte.uab.es) and may be subject to changes in the programming for reasons of adaptation to possible incidents. The Caronte website will always be informed of these changes, since it is understood that the Caronte website is the usual mechanism for exchanging information between teachers and students.

For each evaluation activity, a review place, date and time will be indicated in which the student will be able to review the activity with the teacher. In this context, claims may be made about the grade for the activity, which will be evaluated by the teaching staff responsible for the subject. If the student does not show up for this review, this activity will not be reviewed later.

Without prejudice to other disciplinary measures deemed appropriate, and in accordance with current academic regulations, irregularities committed by the student that may lead to a variation in the grade of an evaluation act will be graded with a zero. Therefore, plagiarizing, copying or allowing a practice or any other evaluation activity to be copied will imply failing it with a zero and it will not be possible to recover it in the same academic year. If this activity has a minimum associated mark, then the subject will be suspended.

Bibliography

- Matias Bilkis, Joan Moyà Kohler and Fernando Vilariño. Challenge-device-synthesis: A multi-disciplinary approach for the development of social innovation competences for students of artificial intelligence. EDULEARN 2024.
- Eric von Hippel. Democratizing Innovation. MIT Press 2005.
- Henry Chesbrough, Wim Vanhaverbeke and Joel West. Open Innovation: researching a new paradigm. Oxford University Press. 2006.
- Ash Maurya. Running Lean. O'Reilly 2012.
- Tim Brown. Change by Design. Harper Collins, 2009.
- Thomas Lockwood. Design Thinking. Integrating Innovation, Costumer Experience, and Brand Value. Alworth Press. 2009.
- Anna Ståhlbröst and Marita Holst. The Living Lab Methodology Handbook. Luleå University Press. 2012.
- Penny Evans, Dimitri Schuurman, Anna Ståhlbröst and Koen Vervoort. Living Lab Methodology Handbook. U4IoT Consortium. 2017.
- Citizen Science: Innovation in Open Science, Society and Policy. UCL Press. 2018.

Software

- LaTeX: Software for professional text processing. https://www.latex-project.org
- Overleaf: Web tool for LaTeX edition. https://www.overleaf.com

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this link. To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(PAUL) Classroom practices	711	English	second semester	morning-mixed
(PLAB) Practical laboratories	711	English	second semester	morning-mixed
(PLAB) Practical laboratories	712	English	second semester	morning-mixed
(TE) Theory	71	English	second semester	morning-mixed