

Degree programme	Type	Course
Bachelor in Artificial Intelligence	OB	3

Contact lecturer

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Prerequisites

There are no official prerequisites, but this course can be seen as an extension of Synthesis Project I. It is recommended to take the subject Social Impact of AI in parallel.

Group languages

You can consult this information at the [end](#) of the document.

Objectives

The objective of the subject is to develop a project in groups that requires applying the knowledge acquired in the rest of the subjects to the design and implementation of a solution to a real challenge of artificial intelligence application. For this, the different phases in the development of a project will be addressed, including the analysis of the challenge, the design and implementation of the solution, the analysis of the results and the conclusions. We will use techniques for project management and teamwork organization. The potential ethical, legal or social implications of the proposed solution will also be considered

Learning outcomes

- CM20 (Organise the planning, development, and monitoring of the necessary stages for the realisation of an AI project.) Organise the planning, development, and monitoring of the necessary stages for the realisation of an AI project.
- CM21 (Propose alternatives to minimise ethical risks in the design and development of an AI project, complying with existing regulations.) Propose alternatives to minimise ethical risks in the design and development of an AI project, complying with existing regulations.
- CM22 (Organise the configuration of work teams and the distribution of tasks and responsibilities in an equitable manner, avoiding discrimination and bias of any kind.) Organise the configuration of work teams and the distribution of tasks and responsibilities in an equitable manner, avoiding discrimination and bias of any kind.
- CM23 (Work in coordination with the rest of the development team of an AI project by assuming the individual roles and tasks assigned with responsibility and autonomy.) Work in coordination with the rest of the development team of an AI project by assuming the individual roles and tasks assigned with responsibility and autonomy.
- SM48 (Select the most appropriate methods for solving a complex AI problem.) Select the most appropriate methods for solving a complex AI problem.
- SM49 (Identify the risks from an ethical and legal point of view and the challenges and opportunities at a societal level, in the development of an AI project.) Identify the risks from an ethical and legal point of view and the challenges and opportunities at a societal level, in the development of an AI project.
- SM50 (Present the summary, results, and conclusions of the development of an AI project.) Present the summary, results, and conclusions of the development of an AI project.

Contents

There will be no theoretical contents. The course will mainly consist in the practical implementation of a project.

Learning activities and methodology

Title	Hours	ECTS	Learning outcomes
Follow-up sessions	25	1	CM20, CM22, CM23
Project development	111	4.44	CM20, CM21, CM22, CM23, SM48, SM49, SM50

The course will be organized around the development of a practical project based on a real challenge. Students will work in small groups of 4-6 members in the design and development of a solution to one of the proposed challenges. Class sessions will be mainly devoted to follow-up and practical work on the development of the project.

Students will have to extend the work done in the class sessions with their own work at home in order to be able to complete the project. The main body of the work necessary for the development of the project will have to be done in an autonomous way, apart from class hours.

All the information of the subject and the related documents that the students need will be available at the virtual campus (cv.uab.cat).

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

Continuous assessment activities

Title	Weight	Hours	ECTS	Learning outcomes
Final delivery of the project	50%	0	0	CM21, SM48, SM49
Project report	15%	10	0.4	SM50
Oral presentations	10%	2	0.08	SM50
Follow-up of the project	20%	2	0.08	CM20, CM22, CM23

The project grade is calculated weighting the evidences collected in each of the following activities:

- Follow-up sessions (20%): there will be some class sessions to monitor and assess the progress of the work done by the students.
- Written report (15%): students will have to write a final report describing their solution and presenting and discussing the main results.
- Oral presentation (10%): students will have to make a final oral presentation presenting the work done during the course.
- Technical quality of the implemented solution (50%): this evidence will correspond to the assessment of the

design, implementation and testing of the proposed solution.

- Class attendance (5%)

The minimum mark for all evidences is 4, except for the technical quality of the solution, for which is 5.

In some of these evidences (follow-up sessions and oral presentation) there will be a group grade, but also an individual grade depending on the contribution of each student.

In order to obtain the final grade of the subject, the project grade calculated according to the previous criteria will be weighted by a grade of the individual contribution of each student to the project.

Final grade = Individual assessment * Project grade

The individual assessment of each student will be obtained through a process of intra-group evaluation where each member of the group will assess the contribution of the other members of the group.

As the development of the project is a continuous process throughout the semester, there is no recovery option in case the final grade does not reach the minimum of 5

In this subject, the use of generative Artificial Intelligence technologies is allowed in a controlled manner. The student must clearly identify which parts of his/her work have been carried out with the support of generative AI tools and, in any case, must be able to understand, explain and justify the work carried out. The lack of transparency in the use of generative AI will be considered a lack of academic honesty and may lead to a partial or total penalty in the grade of the activity.

Bibliography

There is no specific bibliography

Software

It will depend on the project

Course groups and languages

The information provided is provisional until November 30. After this date, you will be able to consult the language of each group through this [link](#). To access the information, you will need to enter the course CODE

Type of teaching	Group	Language	Semester	Shift
(ABP) Aprenentatge basat en problemes	1	English	second semester	afternoon
(ABP) Aprenentatge basat en problemes	2	English	second semester	afternoon