

Masters Degree Dissertation

Code: 44738
ECTS Credits: 12

Degree	Type	Year	Semester
4318303 Research and Innovation in Computer Based Science and Engineering	OB	0	2

Contact

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Teaching groups languages

You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject. Please note that this information is provisional until 30 November 2023.

Prerequisites

None.

Objectives and Contextualisation

The final master's thesis is a subject that allows the student to deepen the study of a topic of his interest by carrying out research work in a public or private center. This work is articulated in accordance with the principles of a scientific work and must deal with topics in which the research groups linked to the master's degree work and that are capable of applying advanced knowledge acquired in the context of the master's degree. The objective of the final master's thesis is to prepare students for future research work, that is, a doctoral thesis or an R + D + i project in a company or administration.

Learning Outcomes

- CA20 (Competence) Apply specific research methodology, techniques and resources to research and produce innovative results based on advanced computing systems.
- CA22 (Competence) Generate questions and hypotheses in the face of new research challenges and demonstrate originality in the way they approach and solve problems using advanced computational techniques.
- KA28 (Knowledge) Identify stereotypes and gender roles that appear in supervised work.
- SA35 (Skill) Propose solutions to problems related to the application of advanced computational methods as part of a working group.
- SA36 (Skill) Communicate the results of your work and the rationale behind them to specialised and non-specialised audiences in a clear and unambiguous way.

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- SA37 (Skill) Plan the activities involved in completing a given task within a working group and appropriately manage time and resources.
- SA42 (Skill) Select suitable information sources from scientific literature using the appropriate channels, then integrate this information using synthesis and debate skills and analysing any viable alternatives.
- SA43 (Skill) Produce a publishable document in accordance with the End-of-Master's dissertation regulations using specific knowledge.

Content

There are not theoretical contents for this module.

Methodology

The student must carry out an original work addressing a series of objectives related to a specific problem, taking into account the background, the current state of knowledge and the initial assumptions or hypotheses. From there, the student must propose a solution applying the computational techniques and methods that he considers appropriate in accordance with the strategy and work plan that he has designed under the supervision of an academic tutor, who will also advise during the different phases of carrying out the work.

The follow-up of the student's work will be carried out through periodic supervision meetings with her tutor where the progress of the work will be evaluated following the indicators established in a system of rubrics.

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.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Supervised			
Regular meetings with the supervisor	10	0.4	SA37, SA42, SA37
Type: Autonomous			
Elaboration of the master thesis document	290	11.6	CA20, CA22, KA28, SA35, SA36, SA43, CA20

Assessment

For the evaluation of the master's thesis, the student must:

- Submit a written report of the research work carried out.
- Carry out a public defense of this report in front of an Evaluation Committee.

The qualification criteria will be based on the proposal of the members of the Evaluation Committee (70%) on the quality of the written report, its presentation and oral discussion, and on the evaluation of the report presented by the director and / or work tutor (30%).

The academic tutor's evaluation of the master's thesis must take into consideration the following: initiative, responsibility, ability to interpret the results, and any other criteria that he deems pertinent.

The Evaluation Committee will be made up of three members, including professors with PhDs from the UAB departments participating in the master's degree and external experts (PhDs or with proven experience in R&D work).

The Commission will evaluate for the memory the appropriate use of language, content and academic originality, and the conciseness and ability to analyze and interpret the results of the investigation. For the oral defense, it will evaluate the student's communicative ability and conciseness, the quality of the presentation and the ability to answer the questions asked by the Evaluation Committee.

The dates to deliver the report and make the public defense will be indicated at the beginning of the course based on the academic calendar set by the School of Engineering.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Master thesis document	45%	0	0	CA20, CA22, KA28, SA35, SA36, SA37, SA42
Oral defense of master thesis	25%	0	0	CA20, CA22, SA36
Report of academic tutor	30%	0	0	CA20, CA22, KA28, SA35, SA36, SA37, SA42, SA43

Bibliography

There are no specific references.

Software

There is no specific software.