

Degree programme	Type	Course
Computational Mathematics and Data Analytics	PRO	4

Contact lecturer

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Group languages

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

Prerequisites

To enroll in this elective course, it is recommended that students have successfully completed the first two years of the degree program and earned at least 150 ECTS credits. Students must have an academic supervisor, who must be one of the lecturers of the course.

Note: Enrollment can be completed together with the other courses, but it is recommended to wait until the internship agreement between the UAB and the host institution has been signed (which may occur at any time during the academic year). This allows the initial steps required for the course to be completed before formal enrollment. Updated information for students who have not yet enrolled will be available in the Communication Space of the Virtual Campus.

Objectives

The main goal of the subject is to bring the student closer to the professional reality and facilitate the job placement in a job related to the studies he has done in the degree. By taking this subject the student will be able to contrast the theoretical and practical knowledge acquired in the degree studies with the needs of professional life. He will also have the opportunity to work in interdisciplinary teams. In this way he has the opportunity to validate the professional orientation that he wants to follow once he has finished the degree.

Learning outcomes

- CM49 (Perform professional tasks related to computational mathematics and data analytics with ethical responsibility that test critical and reflective capacity, encouraging decision-making.) Perform professional tasks related to computational mathematics and data analytics with ethical responsibility that test critical and reflective capacity, encouraging decision-making.
- CM50 (Compare the theoretical and practical knowledge acquired.) Compare the theoretical and practical knowledge acquired.
- CM51 (Work in interdisciplinary teams with ethical responsibility and paying attention to sex/gender equality.) Work in interdisciplinary teams with ethical responsibility and paying attention to sex/gender equality.
- CM52 (Apply the theoretical knowledge acquired in professional life.) Apply the theoretical knowledge acquired in professional life.
- CM53 (Apply the practical skills acquired in professional life.) Apply the practical skills acquired in professional life.
- KM40 (Identify the skills facilitating the student's incorporation into the labour market.) Identify the skills facilitating the student's incorporation into the labour market.

Contents

Stages and activities to be carried out by the student throughout the internship period:

Interview with the tutor/academic. Preparation of the CV (2 hours)

Planning: search, interviews, organization (10 hours)

Work at the company (250 hours)

Memory preparation (30 hours)

Preparation of the public exhibition of the work carried out (6 hours)

Public presentation and assistance in the preparation of colleagues (2 hours)

Learning activities and methodology

Title	Hours	ECTS	Learning outcomes
Report and public exhibition	38	1.52	
Interview and planning	12	0.48	
Work in the company	250	10	

This course has somewhat unusual characteristics, as you may enroll in it at any point during the academic year, once you are about to sign your internship agreement. It is not necessary to register for it together with your other courses. Therefore, you can complete the initial steps required for the course before you are formally enrolled.

It is very important that you access the section dedicated to Internships in the Degree Communication Space on the Campus Virtual. Among the documents available there, you will find:

- The protocol document where you will find detailed information about the subject.
- The internship history where you can consult the companies and entities where your colleagues have been in previous years.
- The additional documentation required to do the subject (pre-agreement document, internship tutor evaluation sheet, etc.)
- Internship offers.

Details of activities according to the stages of the internship period:

- Stage 1. You must fill out the initial form and prepare your CV. Send both to the academic tutor. Hold an interview with the academic tutor and, if necessary, revise the CV. It is necessary to see what type of work is suitable for the student's needs and conditions.
- Stage 2. Look for work and go to job interviews. Once the job has been chosen, it is necessary to fill out, together with the company, the proposed UAB-Company agreement. It is necessary to specify the work to be done, how it will be done, at what time and on what dates. The Company must also designate a tutor who will oversee the student's training within the Company; this tutor, once the work has been completed, must prepare an evaluation report that includes the accreditation of the hours worked and the work done, how it has been done and the student's relationship/adaptation in the work team.
- Stage 3. Complete the tasks assigned by the company with the supervision of the company's tutor.
- Stage 4. Preparation of the report of the internships carried out. The student will have a guide on the VirtualCampus.
- Stage 5. Preparation of the public exhibition of the report (must have a maximum duration of 10 minutes). It is recommended to use ICT.
- Stage 6. Public exhibition of the report and assistance to those of other colleagues who have carried out the internships in the same period.

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
Public exhibition	20%	0	0	CM49, KM40
Work in the company	60%	0	0	CM49, CM50, CM51, CM52, CM53, KM40
Practice report	20%	0	0	CM50, CM52, CM53, KM40

The criteria used for the evaluation of the subject \"Internships in Companies\" are the following:

- Evaluation report of the tutor appointed by the Company (60%)
- Content of the Internship Report (20%)
- Public presentation of the Report in front of a court and colleagues who have done the internship in the same period (20%)

To be evaluated positively, two conditions are essential:

- (a) That the tutor's report is positive.
- (b) Achieve a positive evaluation in the exhibition.

The student will be considered as \"Not Presented\" in case the tutor of the Company does not certify that he/she has effectively carried out the work, or in case he/she does not make the public exhibition.

In summary, you need:

- Accreditation of working hours by the Company's tutor.
- Report/evaluation of the Company's tutor (it must include the work done, the hours worked and an assessment of how the work was done and the adaptation to the work team).
- Oral presentation of the work carried out in front of a teacher responsible for the subject and the other colleagues who have also completed the internship in the same period.

This subject, due to its characteristics, does not have the single assessment option.

The student must clearly indicate whether the Internship Report and the presentation slides contain any parts that have been generated using Artificial Intelligence. The tools used must be specified, and a critical reflection should be included on how these tools have influenced both the process and the final outcome. Failure to transparently disclose the use of AI in assessment activities will be considered a breach of academic integrity and may result in a partial or total penalty in the final grade.

Bibliography

The bibliography will be variable depending on the type of practice, often provided by the same company. It can be useful to have at hand the bibliography used in the subjects of the degree.

Software

The software will be variable depending on the type of practice, often provided by the same company. It can be useful to have on hand the software used in the subjects of the career.

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
(PEXTintern) Pràctiques externes i pràcticum (amb supervisió interna)	1	Catalan	Undefined	morning-mixed