

## Enterprise Resource Planning (ERP)

Code: 107571  
ECTS Credits: 6

**2025/2026**

Degree	Type	Year
Business and Information Technology	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

Although it is not compulsory, it is recommended to have previously studied the subjects 104609 - Business Process Management and 102148-Introduction to information systems. If this is not the case, it is important to have the following concepts clear:

- Processes and process management in an organization
- the basic concepts of information systems
- corporate management systems (ERP, CRM, SCM, BI, MES, KMS, etc.)

It is very important to know how to navigate with SAP (S4HANA) beforehand. Those who have not done so will have material during the first days of class to be able to have a minimum to be able to do the practical part. Failure to meet this requirement may result in not being able to do the practical part.

### Objectives and Contextualisation

Information systems in the company and the technologies that support them are interrelated with the various functional areas (production, human resources, accounting, finance and marketing) and provide the organization with flexibility and responsiveness vital for its competitiveness. For this reason, it is necessary to train professionals with business and economic knowledge who not only master the technological processes of information management in organizations, but are also capable of integrating this knowledge to help the organization achieve its objectives and missions, improving management control; the quality and quantity of information available for decision-making; and formulating new value generation proposals.

Therefore, the basic objective of the subject is to provide a very clear vision of the role that ERPs play in business management, how they add value to the business, what are the most common difficulties in their implementation and how to improve the chances that it will truly be a success.

## **Learning Outcomes**

1. CM23 (Competence) Evaluate an ICT management and administration system according to evidence-based criteria such as strategic alignment, value generation, cost efficiency among others.
2. CM24 (Competence) Configure the architecture of an information system that supports an organisation in an integrated manner.
3. KM21 (Knowledge) List the main characteristics of today's corporate management systems as value generators for companies and organisations.
4. KM23 (Knowledge) Identify the contributions of innovations in the market of integrated management systems.
5. KM26 (Knowledge) Identify the uses and requirements of the main corporate management systems.

## **Content**

### **1. Structure and Typology of ERP (Enterprise Resource Planning)**

Common modules of an ERP

Interaction with business processes.

### **2. ERP Market**

ERP's according to the activity and size of the company

Main ERP's manufacturers

### **3. Implementation of an ERP**

Selection of ERP's. ERP versus custom programming

Parameterization and customization of ERP's

Integration with other company software.

Integration of data and management of teachers

TCO (Total Cost Ownership). Evaluation of the investment project derived from the acquisition, deployment and operation of an ERP

Change management in an ERP implementation.

Training of the human capital of the organization

### **4. Operation and maintenance of the ERP**

Service management and ERPs

Outsourcing and relationships with service providers

Structure and Roles.

## Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Classroom practices	10	0.4	KM21, KM23, KM26, KM21
Laboratory practices (SAP)	10	0.4	KM21, KM23, KM26, KM21
Theoretical classes, cases and seminars	29.5	1.18	CM23, CM24, KM21, KM23, KM26, CM23
Type: Supervised			
Tutorials	15	0.6	CM23, CM24, KM21, KM23, KM26, CM23
Type: Autonomous			
Individual study	51.5	2.06	CM23, CM24, KM21, KM23, KM26, CM23
Teamwork and Case preparation	31	1.24	CM23, CM24, KM21, KM23, KM26, CM23

### Teacher-student relationship

General and relevant information about the subject that details the contents of the teaching guide, such as dates and conditions for submitting assignments, will be published on the virtual campus (or equivalent place) and may be subject to changes in programming for reasons of adaptation to possible incidents; the virtual campus will always be informed about these changes since it is understood that the virtual campus is the usual mechanism for exchanging information between teacher and student.

### Languages

Classes will be held mostly in Catalan or Spanish, although it is very common for terms to appear in English. Written or supporting material for the subject (notes, bibliography, references, or even statements of practices, exercises, or cases) can be provided in both Catalan and Spanish, and English; and this case, the use of the English language may not be exceptional but usual. The final test and reassessment will be written in Catalan or Spanish. The answers to the tests and exercises can be submitted (and if applicable, presented) in Catalan, Spanish, or English.

### Teamwork

During the course, teamwork and the collaborative exchange of information and tools for problem-solving will be encouraged. However, the final learning process must be individual, highlighted by the autonomous activity of each student, which must complement and enrich the work begun in the guided sessions of the course. The supervised activity, around regular tutorials and sporadic consults carried out during the course, is also an essential tool in the acquisition of the knowledge provided by the subject.

### Lectures, cases, seminars, and classroom practices

The basic contents that students need to be introduced to the topics that make up the program are presented. At the same time, possible ways to complete or deepen the information received in these sessions are indicated. During these sessions, the case method can also be used as a teaching tool, depending on the degree of student participation. Additionally, a series of seminars (conferences and talks) will be planned by experts in

the sector who will present real experiences and which will serve as a complement to the discussion of the concepts explained in the classes and to encourage related work.

### SAP Practices

Throughout the course, a set of practices will be carried out with different SAP modules, where business processes will be reproduced with this tool. All the material and software are in English. Part of it will be done in a computerized classroom led by the faculty, and the other part will be supervised work via tutorials.

### Use of Artificial Intelligence (AI):

In this subject, the use of Artificial Intelligence (AI) technologies is allowed and encouraged as an integral part of the development of the work, provided that the final result reflects a significant contribution by the student in the analysis and personal reflection. In assignments, unless explicitly stated otherwise, the student must identify which parts have been generated with this technology, specify the tools used and include a critical reflection on how these have influenced the process and the final result of the activity. The lack of transparency in the use of AI will be considered a lack of academic honesty and may lead to a penalty in the grade of the activity, or greater sanctions in serious cases. The use of AI is not allowed in exams.

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	Weighting	Hours	ECTS	Learning Outcomes
Continuous Assessment (AC1): SAP practices	35%	0	0	KM21, KM23, KM26
Continuous assessment (AC2): Participation, exercises, and teamwork	25%	0	0	CM23, CM24, KM21, KM23, KM26
Exams	40%	3	0.12	CM23, CM24, KM21, KM23, KM26

This subject does not have a single assessment system.

The assessment of the subject takes into account the following elements:

- Continuous assessment (AC) 60%, two parts:
  - AC1: Laboratory Practices (35%): 5 practices with SAP. A minimum of 2.5/10 is required in four practices; if not achieved, this part (AC1) is assessed as zero. For students who have not previously taken SAP, there will be a series of additional practices that they must pass before starting the internship to be eligible to be evaluated. If they are not completed, this part will count as zero.
  - AC2: Participation, Exercises and assignments (25%): Problem-based learning exercises, case discussion, individual or team work, presentation of results in class and other tests that are determined. Class participation will also be assessed.
- Exams (EX) 40%:
  - Partial exams may be scheduled throughout the course.
  - Final: Students who have not passed any of the tests or who want to raise their grade can retake them. The resulting grade will be the highest.
  - The resulting grade for the exam part (EX) will be the weighted average of the parts.

Calculation of the final grade:

- If  $AC \geq 5$  AND  $EX \geq 4$  --> The final grade for the subject (N) will be:  $N = 40\%(EX) + 60\%(AC)$ .
- If  $EX < 4$  OR  $AC < 5$  -->  $N = \text{MIN}(40\%(EX) + 60\%(AC); 4)$ .
- The student passes the subject if  $N \geq 5$ , and fails if  $N < 3.5$ . In the intermediate case, they can use the recovery process detailed below.
- Anyone who has not presented any SAP (AC1) practice, has participated in less than 20% of AC2 activities, and has not taken any exams will be considered non-evaluable.

#### Calendar of assessment activities

The dates of the different assessment activities (exams not scheduled by the faculty, classroom exercises, submission of work, ...) will be announced sufficiently in advance during the semester.

The dates of the partial and final tests of the subject are scheduled in the Faculty's exam calendar.

According to the UAB Academic Regulations, the scheduling of assessment tests cannot be modified unless there is an exceptional and duly justified reason for which an assessment act cannot be carried out. In this case, the people responsible for the degrees, after consulting the teaching staff and the affected students, will propose a new schedule within the corresponding academic period.

Students of the Faculty of Economics and Business who, by the previous paragraph, need to change an assessment date must submit the request by filling out the document Request for rescheduling an exam: [https://eformularis.uab.cat/group/deganat\\_feie/reprogramacio-proves](https://eformularis.uab.cat/group/deganat_feie/reprogramacio-proves)

#### Grade review procedure

The day and means by which the final grades will be published will be announced coinciding with the final exam. Similarly, information will be provided on the procedure, place, date, and time of the exam, in accordance with University regulations.

#### Recovery Process

According to the UAB Academic Regulations, to participate in the recovery process, students must have previously been evaluated in a set of activities that represent a minimum of two-thirds of the total grade for the subject or module. They must have obtained an average grade for the subject between 3.5 and 4.9.

The date of this test will be scheduled in the Faculty's exam calendar. The recoverable part is the exam part.

The resulting grade will follow the same previous calculation. Whoever passes the retake, the resulting grade will be the maximum between 5 and  $0.6 \cdot AC + 0.4 \cdot 4$

#### Irregularities in the assessment acts

According to UAB academic regulations: Without prejudice to other disciplinary measures that may be deemed appropriate, and by current academic regulations, "if the student carries out any irregularity that may lead to a significant variation in the grade of an assessment act, this assessment act will be graded 0, regardless of the disciplinary process that may be instructed. If several irregularities occur in the assessment acts of the same subject, the final grade for this subject will be 0".

## Bibliography

Díaz Domínguez, L. F., & Navarro Huerga, M. A. (2022). \*Sistemas de gestión integrada para las empresas (ERP)\*. Editorial UOC.

Mancuzo, G. (2023). \*La implantación de un sistema ERP para la gestión de la información\*. Universidad de Cádiz.

Murray, M. (2021). \*SAP S/4HANA: An introduction\*. SAP Press.

Snabe, J. H., Rosenberg, A., Møller, C., & Scavillo, P. (2020). \*Business Process Management: The SAP Roadmap\*. Springer.

Monk, E., & Wagner, B. (2021). \*Concepts in Enterprise Resource Planning\* (5th ed.). Cengage Learning.

Bradford, M. (2022). \*Modern ERP: Select, Implement, and Use Today's Advanced Business Systems\* (4th ed.). Lulu Press.

Magal, S. R., & Word, J. (2020). \*Integrated Business Processes with ERP Systems\*. Wiley.

## Software

SAP S/HANA

## 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	201	Catalan/Spanish	second semester	morning-mixed
(PLAB) Practical laboratories	201	Catalan/Spanish	second semester	morning-mixed
(PLAB) Practical laboratories	202	Catalan/Spanish	second semester	morning-mixed
(TE) Theory	20	Catalan/Spanish	second semester	morning-mixed