

**COURSE DATA****DATA SUBJECT****Code:** 36509**Name:** Accounting Analytics**Cycle:** Undergraduate Studies**ECTS Credits:** 6**Academic year:** 2026-27**STUDY (S)**

Degree	Center	Acad. year	Period
1332 - Degree in Business Intelligence and Analytics	Facultat d'Economia	2	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1332 - Degree in Business Intelligence and Analytics	Contabilidad de Gestión	COMPULSORY

COORDINATION

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SUMMARY

Cost Accounting is a compulsory 6 ECTS credit course taught in the first semester of the second year, and it belongs to the Accounting module.

Cost Accounting introduces the study of economic events within the internal scope of the company and addresses the challenges of their calculation and accounting capture, with the goal of obtaining cost figures, margins, and results that information users can use for decision-making.

This course complements the accounting training that students began to acquire through the Accounting Information Systems course. It connects with that course through the valuation of inventories in manufacturing companies and a more detailed analysis of the income statement.

Cost Accounting has a predominantly practical content, which is explored in depth through the study of practical cases developed in class or assigned to students as individual work.

PREVIOUS KNOWLEDGE**RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**



There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

In relation to other subjects of the same degree, no enrollment restrictions have been specified with other subjects of the study plan.

With respect to other types of requirements, this subject does not require prior knowledge in order to be taken. The study plan does not specify enrollment restrictions in relation to other subjects.

COMPETENCES / LEARNING OUTCOMES

1332 - Degree in Business Intelligence and Analytics

Be able to learn autonomously.

Be able to make autonomous decisions in digital environments characterised by the abundance and dynamism of data.

Be able to solve problems and to communicate and spread knowledge, skills and abilities, taking account of the ethical, egalitarian and professional responsibility of the activity of business intelligence and analytics.

Be able to use ICT, both in academia and in professional practice.

Demonstrate skills for analysis and synthesis.

Design and implement cost allocation models based on the digital records of accounting information systems.

Establish a system of business management indicators.

Evaluate the internal control system within the framework of accounting information systems.

Know and know how to properly use the appropriate quantitative and qualitative methods to reason analytically, evaluate results and predict economic and financial magnitudes.

Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.

Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.

DESCRIPTION OF CONTENTS



Topic 1. Analytical Accounting: Basic Concepts and Sustainability.

- 1.1. Internal scope vs. external scope of accounting: sustainability as a guiding element.
- 1.2. Cost accounting: definition and objectives.
- 1.3. Basic terminology of cost accounting.
- 1.4. Production costs and period costs.
- 1.5. External result and internal result.

Topic 2. Cost Analysis Phases, Allocation Models, and Calculation Methods

- 2.1. Combination of production factors. Limiting factors and production capacity.
- 2.2. Logical phases of cost analysis: classification, allocation, and assignment.
- 2.3. Cost classification:
 - 2.3.1. By nature.
 - 2.3.2. By function.
 - 2.3.3. By behavior.
 - 2.3.4. By traceability.
 - 2.3.5. By timing of calculation.
- 2.4. Cost allocation:
 - 2.4.1. Cost centers: concept and classification.
 - 2.4.2. Primary distribution or allocation of costs between centers.
 - 2.4.3. Secondary distribution or internal reallocation between related cost centers:
 - 2.4.3.1. Direct method.
 - 2.4.3.2. Step-down method.
 - 2.4.3.3. Reciprocal services method.
- 2.5. Cost assignment: concept of unit of work, unit of assignment, or cost center activity unit.
- 2.6. Types of production.
- 2.7. Cost allocation models:
 - 2.7.1. According to degree of attribution.
 - 2.7.2. According to location.
 - 2.7.3. According to timing of calculation.
 - 2.7.4. According to production characteristics.
- 2.8. Principles (proportionality and identification) and calculation methods (rates/surcharges or division).

Topic 3. Types of Costs

- 3.1. Concept and types of materials.
- 3.2. Valuation of input costs: acquisition price of materials and specific procurement costs.
- 3.3. Calculation of materials actually consumed:
 - 3.3.1. By direct measurement of consumed units (perpetual inventory).
 - 3.3.2. Measuring ending inventory and estimating consumed units (periodic inventory).



- 3.4. Valuation of consumption using historical cost criteria: average costs (WAP or WAC) and inventory depletion (FIFO).
- 3.5. Labor and other personnel costs: direct and indirect compensation.
- 3.6. Compensation based on time worked and quantity produced.
- 3.7. Calculation of labor hourly cost.
- 3.8. Depreciation of productive equipment.
- 3.9. Other costs of productive equipment.
- 3.10. Supplies and other external services.

Topic 4. Job Order Costing

- 4.1. General characteristics of job order costing systems.
- 4.2. Cost accumulation scheme for job order costing.
- 4.3. Actual costing vs. normal costing systems.
- 4.4. Budgeted indirect costs:
 - 4.4.1. Calculation of budgeted overhead rates.
 - 4.4.2. Basic determination and analysis of variances.
 - 4.4.3. Allocation of variances in the calculation of results.

Topic 5. Process Costing

- 5.1. Characteristics of cost accumulation by processes.
- 5.2. Issues in cost calculation by division: measuring production and obtaining equivalent units.
- 5.3. Cost allocation criteria for produced units:
 - 5.3.1. FIFO method: uniform valuation of finished units and separate valuation of completed units.
 - 5.3.2. Weighted Average Cost method (WAC).

Topic 6. Joint Production

- 6.1. Concept of joint production: co-products and by-products.
- 6.2. Allocation of joint costs among co-products:
 - 6.2.1. Criteria based on physical units produced.
 - 6.2.2. Criteria based on sales or value generation.
- 6.3. Treatment of by-product costs:
 - 6.3.1. Zero-cost criterion.
 - 6.3.2. Market value criterion.



Topic 7. Budgeting and Standard Costing

- 7.1. Budgeting: concept and integration of budgets.
- 7.2. Fixed budget and flexible budget.
- 7.3. Standard cost: definition and calculation phases.
- 7.4. Development of standard cost.
- 7.5. Application of standard cost.
- 7.6. Variance analysis:
 - 7.6.1. Variances in direct and variable production costs (materials and labor): quantity (technical) variance and price (economic) variance.
 - 7.6.2. Variance in specific procurement costs.
 - 7.6.3. Variances in indirect (non-variable) production costs & transformation costs: technical, efficiency, or performance variance; economic variance; activity, capacity, or volume variance; budget variance.
 - 7.6.4. Variances in commercial and administrative costs.
- 7.7. Allocation of variances in the calculation of results

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	30,00
Computer classroom practice	30,00
Total hours	60,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	10,00
Independent study and work	30,00
Preparation of lessons	30,00
Preparation for assessment activities	10,00
Resolution of case studies	10,00
Total hours	90,00

TEACHING METHODOLOGY

In the teaching-learning process of this subject, different didactic methods will be used in order for the student to acquire the competencies previously described. The teaching methods to be used in both theoretical and practical classes are presented below, classified into the following categories:

1. Methodologies for "learning from others":

In some theoretical classes, the "didactic lecture" model will be used, as it allows the instructor to



emphasize the most important aspects, demonstrate mastery of the subject matter, and present a specific way of working with and studying the subject.

The "participatory lecture" model may also be used in both theory and practice sessions to encourage communication among students and between students and the professor.

2. Methodologies for "learning alone":

Individual study and the promotion of self-directed learning will be supported by designing activities aimed at increasing knowledge in this field. All these activities should be carried out by the students and must be subject to assessment by the instructor. For example, students may be assigned individual or group case studies that will be evaluated by the professor.

EVALUATION

The final evaluation of this subject is divided into two parts:

- The synthesis test (written exam) will account for 70% of the final grade. In order to pass the course, it is a mandatory requirement to pass this synthesis test (written exam), which means obtaining a minimum score of 5 out of 10. The synthesis test will include both theoretical questions and practical cases, and it will be designed to ensure that this score reflects the minimum level of knowledge the student should have to pass the subject.
- The evaluation of the practical activities carried out by the student during the course, along with continuous assessment, will represent 30% of the final grade. If the student chooses not to participate in this continuous assessment, the maximum grade they can achieve will be that obtained in the synthesis test (written exam), weighted at 70%. Therefore, if a student chooses this option, they will need to obtain a minimum of 7.15 out of 10 in the exam to pass the subject.
- The minimum final grade to pass the subject will be 5 out of 10, calculated by adding the score of the synthesis test (provided that the student has achieved at least 5 out of 10 in that test) to the score obtained from the assessment of practical activities (maximum of 3 out of 10).

In the second exam session, continuous assessment activities are NOT RECOVERABLE; that is, the score obtained in the first session will be retained.

REFERENCES

- APARISI, J.A.; GANDÍA, J.L.; HUGUET, D. Y MONTAGUD, M.D. (2017): Supuestos prácticos de Contabilidad de Costes. Editorial Ezcurrea.
- BLANCO, I.; AIBAR, B. y RIOS, S.L. (2001): Contabilidad de costes. Cuestiones, supuestos prácticos resueltos y propuestos. Prentice Hall.
- HORGREN, CH.T., FOSTER, G. y DATAR, S.M. (2002): Contabilidad de costos. Un enfoque gerencial. Prentice-Hall.
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- SERRA SALVADOR, V. (2003): Contabilidad de costes: cálculo, análisis y control. Tirant Lo Blanch, colección Manuales.



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