

30130 - Economic Engineering

Syllabus Information

Academic year: 2023/24

Subject: 30130 - Economic Engineering

Faculty / School: 175 - Escuela Universitaria Politécnica de La Almunia

Degree: 425 - Bachelor's Degree in Industrial Organisational Engineering

ECTS: 6.0

Year: 3

Semester: Second semester

Subject type: Compulsory

Module:

1. General information

The main objective is the knowledge and use of basic economic instruments aimed at the analysis of information for business management, allowing managers to make operational and strategic decisions based on the study and estimation of costs, productivities, revenues and results.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>): SDG-8 (targets 8.2., 8.4.), SDG-12 (targets 12.1., 12.5.), SDG-16 (targets 16.5., 16.6.); so that the acquisition of the subject learning results provides training and knowledge, skills and competencies to contribute to some extent to their achievement.

2. Learning results

1. Identify and know how to calculate the different types of costs for each production environment and distribute them among products, services and areas of the company for decision making.
2. Establish the company's profitability threshold and perform cost-volume-profit sensitivity analysis to overcome uncertainty in the company's decision making process.
3. Develop productivity scorecards and integral learning and improvement systems in the organization.
4. Make strategic and economic decisions on internalization or outsourcing of the company's production and logistics activities of the company.
5. Establish sales prices for the company's products and services in the market.
6. Make decisions about quality management in the company with the analysis of quality costs.
7. Prepare budgets for purchase orders, projects and various activities in the company

3. Syllabus

List of contents to be developed in the subject

- Operational areas
- Operations function
- Management indicators
- Concept and types of costs
- Cost models and structures
- Production function costs
- Depreciation methods
- Standard Costs
- Cost-volume-benefit analysis
- Pricing
- Evaluation of financing and investment alternatives

4. Academic activities

Lectures, 28h: Sessions of theoretical exposition and resolution of representative problems

Practical sessions in the classroom, 31h: Problem solving sessions, presentation and discussion of case studies

Assessment tests, 6h: Tests in Continuous Assessment

Tutored activities, 40h: Tutored exercises and case studies distributed throughout the semester

Autonomous student activities, 45h: For autonomous study

5. Assessment system

An optional Continuous Assessment System is proposed, in addition to the Global Assessment System.

Continuous Evaluation System contains practical and theoretical tests throughout the semester

- **Practical tests**, involving the resolution of theoretical and practical exercises. 70% of the final grade

The assessment criteria are the obtaining of results, analysis and interpretation of the results

- **Theoretical tests**, with short open-answer and multiple-choice questionnaires.

30% of the final grade

The assessment criteria for open-ended questions include the accuracy, relevance and clarity of the answer

Eligibility **requirements**:

- Participation in all the assessment tests that comprise it, obtaining in each one of them a minimum grade of 30% of its assessment.
- Minimum attendance at 80% of the semester's face-to-face activities
- Passing the subject by Continuous Assessment requires obtaining 50% of the 100 points in which the subject is assessed

Global Assessment System corresponds to a single exam in an official call, in which the same type of tests and the same assessment criteria as those mentioned for the Continuous Assessment will be posed.