

LOGISTICS, SUPPLY CHAIN & MARITIME BUSINESS

35003 - DEMAND PLANNING

General information

- Academic year 2023/24
- Course: First
- Trimester: First
- Number of credits: 2
- Teachers:
 - Ivette Fuentes Molina <imolina@tecnocampus.cat>

Teaching languages

- Spanish

Presentation of the subject

Demand planning in the Enterprise. The objective of this subject is to analyze the types of demand and generate estimates of the company's demand through various tools. This involves calculating and forecasting the demand for goods or services to align it with production. Demand planning allows the demand planner to efficiently project activities and processes and propose short and long-term strategies.

Competences/learning outcomes

Basic

- CB6 - Possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context
- CB7 How to apply the knowledge acquired and the ability to solve problems in new or little-known environments within broader (or multidisciplinary) contexts related to the area of study.

Specific

- CE1. Show autonomy with critical distance in issues or issues related to the maritime business, logistics and the supply chain and in the application of innovative ideas in these fields.
- CE2. Application of tools and methodologies that facilitate creative and innovative thinking in everyday situations linked in the supply chain environment, logistics, and maritime businesses.
- CE4. Strategically manage the processes of business innovation in the supply chain and the maritime business, from the diagnosis to its application, being able to align resources, abilities and abilities to put them into practice
- CE6. Evaluate the performance of the entire logistics system, taking into account the fulfillment / no of the planned quality, cost and service objectives to detect and prioritize areas of improvement.
- CE7. Manage (plan, program and control) the flow of materials and information (flow of the supply chain) through the direction and coordinated management of the areas of purchases, production and physical distribution of the company.

Transversal

- CT1. Show willingness to learn about new cultures, experience new methodologies and foster international exchange in the context of logistics, the supply chain and maritime businesses.
- CT2. Show entrepreneurial leadership and management skills that strengthen personal confidence and reduce risk aversion.
- CT3. Develop tasks by applying the acquired knowledge with flexibility and creativity and adapting them to new contexts and situations.

No data

Contents

Introduction: Demand planning and forecasting

Topic 1. The demand

- 1.1 Definition of demand according to the types of company and production processes
- 1.2 Types of demand and production needs

Topic 2. Demand forecasting models

2.1 Demand forecasting models: Primary data collection techniques

- 2.1.1 Sample selection
- 2.1.2 The focus group
- 2.1.3 The survey
- 2.1.4 Others

2.2 Demand forecasting models: Quantitative techniques

2.2.1 Short-term demand forecast models based on time series

- Moving averages
- Simple exponential smoothing method

2.2.2 Long-term demand forecasting models

- Regression of time series
- Seasonality
- Trend

2.2.3 Cause and effect models

- Regression models

Sustainable Development Goals

- 12 - Responsible consumption and production
- 09 - Industry, innovation and infrastructure

Evaluation system

The final evaluation will consist of two parts: a) practical cases carried out as a team and b) a final exam.

a) 50% Practical cases

- Final report 30%
- Presentation 20%

b) 50% Final exam

Students must pass each part of the assessment separately to pass the course (minimum grade of 5 out of 10 on each assessment item).