

## LOGISTICS, SUPPLY CHAIN & MARITIME BUSINESS

### 35018 - MODELS FOR PRODUCTION MANAGEMENT

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#### General information

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- Academic year 2023/24
- Course: First
- Trimester: Third
- Number of credits: 3
- Teachers:
  - Valeria Bernardo <[vbernardo@tecnocampus.cat](mailto:vbernardo@tecnocampus.cat)>
  - Genís Majoral Oller <[gmajoral@tecnocampus.cat](mailto:gmajoral@tecnocampus.cat)>

#### Teaching languages

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- English

#### Presentation of the subject

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The subject works first, the tools of production planning, to then explore different systems of production management.

#### Competences/learning outcomes

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##### Basic

- 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.
- CB9 How to communicate the conclusions and the knowledge and ultimate reasons that support the students to specialized and non-specialized audiences in a clear and unambiguous way

##### 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.
- CE5. Design and implement logistics systems, evaluating the different possible alternatives, technical and resource constraints and taking into account coordinated management and management throughout the supply chain.
- 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.

##### Transversal

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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

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### Topic 1:

- Introduction to production management.
- Production process activities

### Topic 2: Production planning

- Capacity planning
- Aggregate planning
- Master Production Schedule
- Material Requirements Planning (MRP)

### Topic 3: Production management systems

- Little's Law
- Toyota production system
- TOC: constraint theory

### Topic 4: Quality management

- TQM - Total Quality Management
- QFD: Quality Function Deployment

## Sustainable Development Goals

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- 12 - Responsible consumption and production
- 05 - Gender equality
- 04 - Quality education
- 09 - Industry, innovation and infrastructure

## Evaluation system

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Class activities: 50%

Final exam: 50%

A minimum of 4 is required on the final exam to average with class activities. The subject is satisfactorily achieved with a 5.