

## 39717 - Production Management

### Syllabus Information

**Academic year:** 2024/25

**Subject:** 39717 - Production Management

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

**Degree:** 608 -

**ECTS:** 6.0

**Year:** 2

**Semester:** Second semester

**Subject type:** Compulsory

**Module:**

### 1. General information

This subject shows how to manage the functional area of production, recognizing that it must act in coherence with the rest of the functional areas and that it can be a source of competitive advantage for the company. Its design introduces the student in the knowledge of models and quantitative techniques, which will favor efficient decision making in the operations area.

### 2. Learning results

1. Distinguishes the different production strategies, as well as identifies the influence of the globalization of operations on the company's production strategy and plans them.
2. Relates the types of production processes with the life cycle of the product in the market and selects the production process according to different parameters.
3. Knows how to apply analysis techniques to select the most suitable equipment for the production process.
4. Relates the types of plant layout to the type of production system. Knows how to balance an assembly line.
5. Applies plant distribution techniques by process.
6. Knows how to use the different diagrams for the representation of work methods.
7. Identifies the different stages in the improvement of a production process.
8. Applies time measurement and task time estimation techniques.
9. Organizes the planning, scheduling and production control of a company. Knows and differentiates the different phases.
10. Uses techniques and applications to manage the company's production process. It is able to put them in practice in real environments.
11. Makes production scheduling decisions taking into account capacity analysis.
12. Applies operations scheduling techniques and models to make decisions on the allocation and sequencing of jobs.
13. Knows how to use techniques for the continuous improvement of the company's production processes.

### 3. Syllabus

- TOPIC 01 INTRODUCTION TO OPERATIONS MANAGEMENT
- TOPIC 02 PRODUCTION PROCESSES AND PRODUCTION METHODS
- TOPIC 03 METHODS FOR FORECASTING DEMAND
- TOPIC 04 PROJECT SCHEDULING AND CONTROL
- TOPIC 05 PRODUCTION PLANNING, SCHEDULING AND CONTROL
- TOPIC 06 PRODUCTION PRODUCTIVITY
- TOPIC 07 PROCESS OPTIMIZATION
- TOPIC 08 METHODS ENGINEERING WORK STUDY
- TOPIC 09 TIME STUDY
- TOPIC 10 INVENTORY MANAGEMENT
- TOPIC 11 LEAN MANUFACTURING

### 4. Academic activities

**Face-to-face activities:**

Theoretical/practical expository classes: Theoretical concepts of the subject will be explained and practical examples will be developed by the teacher.

**Non-face-to-face activities:**

Tutored autonomous activities: They will be focused on the realization of work/projects, either individually or in small groups.

Reinforcement activities: Various exercises, videos and general activities will be conducted through Moodle

Individual tutoring: They may be face-to-face or virtual.

## 5. Assessment system

### CONTINUOUS ASSESSMENT

To be eligible for the Continuous Assessment system, students must attend at least 80% of the classroom activities.

The Evaluation Tests will consist of written tests and practical work:

1. WRITTEN TESTS. They will consist of TWO TESTS consisting of theory questions and problem solving. They make up 60% of the valuation. The following will be valued out of 10 points.

2. PRACTICAL TESTS. They will consist of the elaboration of papers that will be published on the Moodle platform. They account for 40%.

The student must obtain a final grade higher or equal to 5 to pass the subject, being essential to pass the two exams as well as the practical tests/assignments. However, it will be possible to compensate partial exams with assignments if the result of a test is between 4 and 5 points and the average grade of the practical tests/assignments is equal to or higher than 7 out of 10 points.

If during the continuous evaluation any of the tests are not passed, they can be recovered in the global exam of the first call, being evaluated according to the established continuous evaluation system.

For the second call, those students who have not passed the subject in the first round with the entire syllabus may sit for the second call with all the syllabus.

### GLOBAL ASSESSMENT

The student must opt for this modality when, due to their personal situation, they cannot adapt to the pace of work required in the continuous assessment system.

**Written exam:** It will consist of a test containing questions and problems related to the topics explained throughout the subject. This test is valued from 0 to 10 points (minimum score 5) and constitutes 100% of the assessment.

## 6. Sustainable Development Goals

5 - Gender Equality

9 - Industry, Innovation and Infrastructure

12 - Responsible Production and Consumption