

Academic Year/course: 2021/22

60834 - Advanced production techniques during the product life cycle

Syllabus Information

Academic Year: 2021/22

Subject: 60834 - Advanced production techniques during the product life cycle

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura

Degree: 532 - Master's in Industrial Engineering

ECTS: 6.0

Year: 2

Semester: Second semester

Subject Type: Optional

Module:

1. General information

2. Learning goals

3. Assessment (1st and 2nd call)

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The methodology followed in this course is oriented towards achievement of the learning objectives. It is based on the case method and continuous work, and it focuses on the application of advanced production techniques during the product life-cycle management (PLM).

A wide range of teaching and learning tasks are implemented, such as lectures, problems and tasks, industrial case studies, tutorials, and other complementary activities (such as tour companies, participation of external guests, etc.)

4.2. Learning tasks

The course (6 ECTS: 150 hours) includes the following learning tasks:

The distribution of teaching (60 hours) will be as follows:

- a) Teaching of theory through master class and development of technical cases and problem solving: 32 hours taught to the whole group, at a rate of 2 hours / week.
- b) Practical sessions in metrology laboratories and machining workshops: 18 hours, divided into 6 sessions of 3 hours.
- c) Personalized tutorials in individual meetings to monitor the subject projects: 10 hours, divided into 105 12-hour sessions.

4.3. Syllabus

The course will address the following topics:

1. Supply Chain Management: application to product life-cycle management.
2. Planning of computer-assisted production.
3. Lean Manufacturing.
4. Product Identification Systems.
5. Costs associated with product.

6. Programming operations.
7. Internal logistic Product.
8. External logistic Product.
9. Integration of ERP systems.

4.4. Course planning and calendar

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course, will be provided on the first day of class or please refer to the EINA website.