

60832 - Logistics

Syllabus Information

Academic Year: 2019/20

Subject: 60832 - Logistics

Faculty / School: 110 -

Degree: 532 - Master's in Industrial Engineering

ECTS: 6.0

Year: 2

Semester: First semester

Subject Type: Optional

Module: ---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The learning methodology is based on the following principles:

From the methodological point of view the course is mainly based on a practical approach where the student will be able to apply and earn value from the knowledge taught along the theoretical sessions and master classes. For this purpose, the students will develop short group projects and case studies connected to the industrial context.

This course is based on the PBL (Project Based Learning) as well as ?Learning by doing? methodologies, when the student is the key participant centered learning.

4.2.Learning tasks

Theoretical, master classes, and problem practice (30h face to face approximately)

Weekly sessions, 2h each

Short projects and case studies (80h remotely and 10h face to face)

These are the main tasks of the Logistics Course.

The project teams will be based upon 3-8 members depending on each Project and the instructors will follow up the progress of the projects and cases in a weekly basis.

Conferences and seminars (4h face to face approximately)

This task will imply the interaction with experienced professionals from industry around Logistics and supply chain management.

Personal study (25h individual work approximately)

Evaluation test (1h face to face)

For the particular cases of Global Test, the duration might be longer (max 5h).

4.3.Syllabus

T1. Introduction to logistics and supply chain management

T2. Supply chain coordination

T3. Logistics network design and optimization

T4. Analytics and inventory management

T5. Warehouse Logistics

T6. Transportation and distribution

T7. Supply chain risk management

T8. Information technology in logistics networks

4.4.Course planning and calendar

When the course starts and depending on the academic calendar and the school schedule, a customized schedule will be developed accordingly. This will be communicated to the students, including all the various tasks, theoretical sessions, master classes, seminars, practice problems, etc.

The most important tasks will be developed according to:

1. Short projects and case studies: will be scheduled along the overall course, with weekly tasks and deliverables.
2. Evaluation test: according to the exams schedule.

4.5.Bibliography and recommended resources