



## 1. Identification

### 1.1. About the course

Academic Term	2024/2025
Degree	MÁSTER UNIVERSITARIO EN LOGÍSTICA Y DIRECCIÓN DE OPERACIONES
Course	SISTEMAS DE INFORMACIÓN PARA LA CADENA DE SUMINISTRO
Code	6583
Year	PRIMERO
Course type	OBLIGATORIA
Number of groups	4
ECTS	3.0
Estimation of workload	75.0
Timeline	2º Cuatrimestre
Languages	Spanish, English

### 1.2. Teaching staff

#### MARTINEZ GARCIA, FERNANDO MANUEL

Professor: LOGISTICA -SEMI / ESPAÑOL, SUPPLY CHAIN / INGLÉS, LOGISTICA - PRE / ESPAÑOL

Group coordination: LOGISTICA -SEMI / ESPAÑOL, SUPPLY CHAIN / INGLÉS, LOGISTICA - PRE / ESPAÑOL

Course coordinator

Category

CA

Area

There are no records

Department

There are no records

Email / Personal web page / Online tutoring sessions  
[fernandomanuel.martinez@um.es](mailto:fernandomanuel.martinez@um.es) Online tutoring sessions: Sí

Phone number and office hours

## 2. Presentation

The globalization that has occurred in the last decade is offering industrial companies great opportunities for growth, wider markets, better conditions for purchase, a more favorable production environment, but this phenomenon pose enormous challenges for the industry. Companies need to increase their productivity and bring more personalized, efficient and higher quality products to the market to survive the global competition.

In this globalized environment, the keys to a company's success are a good combination of the following "ingredients":

- An optimal management of resources, human and material.
- Flexible and customized production, making small- and large-scale compatible
- An integration of processes of all areas of management of the company and interactions with external agents (customers, suppliers,...), through the use of the appropriate software and applications.

Currently the industry is at a decisive moment to take the step to a new industrial revolution, where the interconnectivity of devices, machines and people is the basis for productive improvement and its flexibility to address the increasingly demanding needs of customers, and by extension the Society. The step already taken towards an "information society" must now be driven towards the factories, creating "intelligent plants" where information management becomes the basis of continuous improvement and process optimization.

The strength and integration of information systems determine part of the weapons that companies have in this global market. Relationships with external actors (customers, suppliers and even consumers) have become a differentiating strategy in the competition between supply chains. Information systems to support these relationships, in their operational aspects and in the support of electronic relations are facilitators of this competitive advantage.

In this environment, this course will focus its content on the extension of the concept of information system towards a set of resources and activities that facilitate the achievement of the objectives of organizations. It is intended to give a broad vision of the different types of systems that students can find and that can help:

- Knowledge of the wide range of offers and opportunities that currently exist in the information systems market.
- Decision-making regarding the selection and implementation of these systems.
- Identify opportunities for the implementation of new information systems in the company.

## 3. Conditions of access to the course

### 3.1. Incompatibilities

There are no records

### 3.2. Requirements

There are no records

### 3.3. Recommendations

Ninguna

## 4. Contents

### 4.1. Theoretical contents

**Theme 1: Information systems for supply chain planning. SCP (Supply Chain Planning)**

**Theme 2: Information systems for the supply chain execution. SCE (Supply Chain Execution)**

**Theme 3: Enterprise Resource Planning (ERP).**

**Theme 4: Information systems for performance analysis and control.**

**Theme 5: Relationships with secondary or support chain information systems.**

**Theme 6: Project management of implementation of information systems for supply chain management**

**Theme 7: State of the art. Comparison of commercial products. New trends (Industry 4.0)**

### 4.2. Practical contents

#### ■ **Practical activity 1: FINAL PRACTICE**

During the course we will develop a CASE STUDY that will cover the complete problem of implementing information systems for the management of the supply chain.

**Related to:**

- Theme 1: Information systems for supply chain planning. SCP (Supply Chain Planning)
- Theme 2: Information systems for the supply chain execution. SCE (Supply Chain Execution)
- Theme 3: Enterprise Resource Planning (ERP).
- Theme 4: Information systems for performance analysis and control.
- Theme 5: Relationships with secondary or support chain information systems.
- Theme 6: Project management of implementation of information systems for supply chain management
- Theme 7: State of the art. Comparison of commercial products. New trends (Industry 4.0)

## 5. Training activities

Training Activity	Methodology	Hours	In-person
AF1.1: Exposición Teórica / Clase Magistral (Modalidad Presencial)	Actividades de clase expositiva. Sesiones presenciales ya sean en el aula o a través de videoconferencias donde el profesor presentará el contenido de la materia utilizando los recursos docentes disponibles.	12.5	100.0
AF1.2: Exposición Teórica / Clase Magistral (Modalidad Híbrida)	Actividades de clase expositiva. Sesiones presenciales ya sean en el aula o a través de videoconferencias donde el profesor presentará el contenido de la materia utilizando los recursos docentes disponibles.	8.0	100.0
AF1.3: Exposición Teórica / Clase Magistral (Modalidad Virtual)	Actividades de clase expositiva. Sesiones presenciales ya sean en el aula o a través de videoconferencias donde el profesor presentará el contenido de la materia utilizando los recursos docentes disponibles.	8.0	0.0
AF2.1: Seminarios / Aprendizaje orientado a proyectos / Estudios de Casos. Exposición y Discusión de Trabajos (Modalidad Presencial)	<p>Realización de clases prácticas que realizará el profesor en el aula o de forma virtual donde las actividades requerirán la participación activa de los alumnos como elaboración y presentación de informes, resolución de casos, etc.</p> <p>Aprendizaje basado en análisis de casos y problemas: Seguimiento y evaluación por parte del profesor a lo largo del curso del trabajo práctico del alumno realizado de forma individual o en grupo, ejercitando los conocimientos, metodologías y técnicas aprendidas durante el curso.</p>	10.0	100.0
AF2.2: Seminarios / Aprendizaje orientado a proyectos / Estudios de Casos. Exposición y Discusión de Trabajos (Modalidad Híbrida)	<p>Realización de clases prácticas que realizará el profesor en el aula o de forma virtual donde las actividades requerirán la participación activa de los alumnos como elaboración y presentación de informes, resolución de casos, etc.</p> <p>Aprendizaje basado en análisis de casos y problemas: Seguimiento y evaluación por parte del profesor a lo largo del curso del trabajo práctico del alumno realizado de forma individual o en grupo, ejercitando los conocimientos, metodologías y técnicas aprendidas durante el curso.</p>	2.0	100.0
AF2.3: Seminarios / Aprendizaje orientado a proyectos / Estudios de Casos. Exposición y Discusión de Trabajos (Modalidad Virtual)	<p>Realización de clases prácticas que realizará el profesor en el aula o de forma virtual donde las actividades requerirán la participación activa de los alumnos como elaboración y presentación de informes, resolución de casos, etc.</p> <p>Aprendizaje basado en análisis de casos y problemas: Seguimiento y evaluación por parte del profesor a lo largo del curso del trabajo práctico del alumno realizado de forma individual o en grupo, ejercitando los conocimientos, metodologías y técnicas aprendidas durante el curso.</p>	2.0	0.0
AF3.1: Trabajo autónomo del estudiante (Modalidad Presencial)	Aprendizaje autónomo dirigido. El profesor propondrá cuestiones teórico prácticas que el alumno deberá resolver con la bibliografía y el material recomendado para ser posteriormente analizadas.	47.5	0.0

AF3.2: Trabajo autónomo del estudiante (Modalidad Híbrida)	Aprendizaje autónomo dirigido. El profesor propondrá cuestiones teórico prácticas que el alumno deberá resolver con la bibliografía y el material recomendado para ser posteriormente analizadas.	61.0	0.0
AF3.3: Trabajo autónomo del estudiante (Modalidad Virtual)	Aprendizaje autónomo dirigido. El profesor propondrá cuestiones teórico prácticas que el alumno deberá resolver con la bibliografía y el material recomendado para ser posteriormente analizadas.	61.0	0.0
AF4.1: Tutorías individualizadas o en grupo (Modalidad Presencial)	Tutorías individualizadas. Sesiones de intercambio individual para guiar al estudiante en la realización de la materia.	5.0	100.0
AF4.2: Tutorías individualizadas o en grupo (Modalidad Híbrida)	Tutorías individualizadas. Sesiones de intercambio individual para guiar al estudiante en la realización de la materia.	2.0	0.0
AF4.3: Tutorías individualizadas o en grupo (Modalidad Virtual)	Tutorías individualizadas. Sesiones de intercambio individual para guiar al estudiante en la realización de la materia.	2.0	0.0
AF5.2: Foros de opinión. (Modalidad Híbrida)	Aprendizaje autónomo dirigido. El profesor propondrá cuestiones teórico prácticas que el alumno deberá resolver con la bibliografía y el material recomendado para ser posteriormente analizadas.	2.0	0.0
AF5.3: Foros de opinión. (Modalidad Virtual)	Aprendizaje autónomo dirigido. El profesor propondrá cuestiones teórico prácticas que el alumno deberá resolver con la bibliografía y el material recomendado para ser posteriormente analizadas.	2.0	0.0
<b>Total</b>		<b>225.00</b>	

## 6. Course schedule

<https://www.um.es/web/estudios/masteres/logistica/2024-25#horarios>

## 7. Assessment systems

Identifier	Name of the assessment tool	Assessment criteria	Weighting
SE1	Participación y aportaciones a discusiones teóricas y casos prácticos realizados en clase de manera individual o en grupo.	Evaluation Criteria In this section, students' attention, willingness to learn, the quality of the comments and questions asked by the students in class, as well as the participation and presentation of ideas generated in the practical cases and exercises during the class will be assessed. In order to assess the monitoring, attention and willingness	20.0

to learn of students, attendance at videoconferences, participation in them through the use of tools such as chat and the delivery of activities within the deadlines indicated in each task requested will be assessed

SE2	Pruebas escritas (Exámenes). Pruebas objetivas, de desarrollo, de respuesta corta, de ejecución de tareas, de escala de actitudes realizadas por los alumnos para mostrar los conocimientos teóricos y prácticos adquiridos.	The professor responsible for the subject will indicate the type of evaluation test, which may be multiple choice tests or open questions. The time available to the students will be indicated in advance, as well as the necessary adaptations for those students with disabilities or special educational needs, taking into account the reports sent by the Diversity and Volunteering Service. In the same way, the type of questions and the approximate number of them will be indicated.	40.0
SE3	Informes escritos, trabajos, caso prácticos.	Evaluation Criteria The resolution of any activity proposed to the student will be assessed in this section. This resolution must be individual and, of course, must be an original work by the student. A good analysis and identification of the problem, its solution and conclusions obtained, the use of specific terms of the subject and the format and quality of the presentation will be assessed The group and /or individual practical activities will be delivered through the virtual classroom according to the criteria established during the course.	40.0

## 8. Exam dates

<https://www.um.es/web/estudios/masteres/logistica/2024-25#examenes>

## Learning outcomes

- RA18 (Conocimientos o contenidos): Valorar las características principales de los diferentes sistemas de información de gestión de la cadena de suministro
- RA19 (Habilidades o destrezas): Seleccionar y aplicar los diferentes sistemas de información para facilitar y optimizar las operaciones logísticas en la cadena de suministro

## 9. Bibliography

### Basic bibliography

There are no records

### Further reading

- "Logistics. Supply ChainManagement", Ronald H. Ballou (2004 )Pearson. Prentice Hall. Mexico.
- "Production and Operations Management", Jay Heizer and Barry Reinder. &nbsp;(2006)Pearson. Prentice Hall. Madrid

- “The digitalization of SMEs”. BanesPyme School

## 10. Remarks

The student who does not take the exam will be marked as ‘no-show’ in the transcript (even if he/she has obtained a mark in the rest of the assessment instruments).

The mark corresponding to the evaluation instrument SE1 is not recoverable and will be kept for the two academic sessions of the current academic year.

The marks corresponding to the assessment instruments SE2 and SE3 are recoverable if the grade is lower than 5 out of 10 and will be kept during the two academic sessions of the current academic year.

If the grade of the overall subject of the course is lower than 5 points out of 10, having passed SE2 and SE3, the grade must be improved in the second call through SE3.

This subject is not directly linked to the Sustainable Development Goals.

### ACCIONES FORMATIVAS

Las Acciones Formativas indicadas en el apartado AF no distinguen entre los distintos grupos. A continuación se detallan las AF de cada modalidad de forma independiente:

Actividades formativas Modalidad PRESENCIAL	Horas	Presencialidad
AF1: Theoretical exposition. Master class	12.5	100%
AF2: Seminars / Projectorientated learning / Case studies. Exhibition and discussion of work	10	100%
AF3. TAutonomous student work (studying the material, reading the support material, watching videos, carrying out case studies, etc.)	47.5	0%
AF4. Individual or group tutoring	5	100%
AF5: Opinion Forums	0	0%
Actividades formativas Modalidad HÍBRIDA	Horas	Presencialidad
AF1: Theoretical exposition. Master class	8	100%
AF2: Seminars / Projectorientated learning / Case studies. Exhibition and discussion of work	2	100%
AF3. Autonomous student work (studying the material, reading the support material, watching videos, carrying out case studies, etc.)	61	0%
AF4. Individual or group tutoring	2	0%
AF5: Opinion Forums	2	0%
Actividades formativas Modalidad VIRTUAL	Horas	Presencialidad
AF1: Theoretical exposition. Master class	8	100%
AF2: Seminars / Projectorientated learning / Case studies. Exhibition and discussion of work	2	100%
AF3. Autonomous student work (studying the material, reading the support material, watching	61	0%

videos, carrying out case studies, etc.)

AF4. Individual or group tutoring	2	0%
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AF5: Opinion Forums	2	0%
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## SPECIAL EDUCATIONAL NEEDS

Those students with disabilities or special educational needs may contact the Service of Attention to Diversity and Volunteering (ADYV - <https://www.um.es/adyv>) to receive guidance on better use of their training process and, where appropriate, the adoption of measures of equalization and improvement for inclusion, under the Rectoral Resolution R-358/2016. The treatment of information about this student body, in compliance with the LOPD, is strictly confidential.

## STUDENT EVALUATION REGULATIONS

Article 8.6 of the Student Evaluation Regulation (REVA) provides that "except in the case of activities defined as compulsory in the teaching guide, if the student is unable to follow the continuous evaluation process due to duly justified supervening circumstances, he/she shall be entitled to take a global test".

It is also recalled that Article 22.1 of the Student Evaluation Regulations (REVA) stipulates that "the student who uses fraudulent conduct, including the improper attribution of identity or authorship, or is in possession of means or instruments that facilitate such conduct, will obtain a grade of zero in the evaluation procedure and, where appropriate, may be subject to sanction, after opening disciplinary proceedings".