

Course guide

220110 - OP - Manufacturing Organization

Last modified: 11/04/2025

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 732 - OE - Department of Management.

Degree: BACHELOR'S DEGREE IN INDUSTRIAL TECHNOLOGY ENGINEERING (Syllabus 2010). (Compulsory subject).

Academic year: 2025 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: Saura Agel, Maria Jose

Others: Saura Agel, Maria Jose

Arcusa Postils, Ignasi
Torres Soto, José Luis

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

CE15-INDUS. Basic knowledge of production and manufacturing systems. (Common module in the industrial branch)

CE17-INDUS. Applied knowledge of business organization. (Common module in the industrial branch)

Transversal:

CT01 N2. Entrepreneurship and innovation - Level 2. Taking initiatives that give rise to opportunities and to new products and solutions, doing so with a vision of process implementation and market understanding, and involving others in projects that have to be carried out.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

The course Production Organisation introduces students to the concepts, principles and basic techniques of operations management. Since the introduction of the concepts about decisions, the course addresses the common techniques used by management in making strategic decisions, tactical and operational within the functional area of operations.

STUDY LOAD

Type	Hours	Percentage
Hours medium group	14,0	9.33
Self study	90,0	60.00
Hours large group	46,0	30.67

Total learning time: 150 h



CONTENTS

title english

Description:

content english

Full-or-part-time: 8h

Theory classes: 2h

Practical classes: 1h

Self study : 5h

title english

Description:

content english

Full-or-part-time: 13h 30m

Theory classes: 4h

Practical classes: 1h

Self study : 8h 30m

title english

Description:

content english

Full-or-part-time: 13h 30m

Theory classes: 4h

Practical classes: 1h

Self study : 8h 30m

title english

Description:

content english

Full-or-part-time: 13h 30m

Theory classes: 4h

Practical classes: 1h

Self study : 8h 30m

title english

Description:

content english

Full-or-part-time: 16h 30m

Theory classes: 6h

Practical classes: 2h

Self study : 8h 30m



title english

Description:

content english

Full-or-part-time: 13h 30m

Theory classes: 4h

Practical classes: 1h

Self study : 8h 30m

title english

Description:

content english

Full-or-part-time: 16h 30m

Theory classes: 6h

Practical classes: 2h

Self study : 8h 30m

title english

Description:

content english

Full-or-part-time: 13h 30m

Theory classes: 4h

Practical classes: 1h

Self study : 8h 30m

title english

Description:

content english

Full-or-part-time: 13h 30m

Theory classes: 4h

Practical classes: 1h

Self study : 8h 30m

title english

Description:

content english

Full-or-part-time: 13h 30m

Theory classes: 4h

Practical classes: 1h

Self study : 8h 30m



title english

Description:

content english

Full-or-part-time: 14h 30m

Theory classes: 4h

Practical classes: 2h

Self study : 8h 30m

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Heizer, Jay H.; Render, Barry. Dirección de la producción y de operaciones: decisiones estratégicas [on line]. 11ª ed. Madrid: Pearson Educación, 2015 [Consultation: 15/06/2022]. Available on: https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=5779. ISBN 9788490352878.
- Chase, Richard B.; Jacobs, F. Robert. Administración de operaciones: producción y cadena de suministros [on line]. 15a ed. México: McGraw-Hill, 2019 [Consultation: 08/03/2023]. Available on: https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=8267. ISBN 9781456261412.
- Womack, J. P., Jons, D. T., Roos, D. La máquina que cambió el mundo. Barcelona: Profit, 2017. ISBN 9788416583973.

Complementary:

- Monden, Yasuhiro. Toyota production system : an integrated approach to just-in-time [on line]. 4th ed. Boca Raton: CRC Press, 2012 [Consultation: 14/07/2025]. Available on: <https://doi-org.recursos.biblioteca.upc.edu/10.1201/b11731>. ISBN 9781439820971.
- Companys, R.; Corominas, A. Organización de la producción. Barcelona: Edicions UPC, 1993-1996.
- Garriga Garzón, F. Problemas resueltos de teoría de la decisión [on line]. Barcelona: OmniaScience, 2013 [Consultation: 30/09/2022]. Available on: <http://dx.doi.org/10.3926/oss.9>. ISBN 9788494062421.
- Garriga Garzón, F. Problemas resueltos de dirección de operaciones [on line]. Barcelona: OmniaScience, 2013 [Consultation: 30/09/2022]. Available on: <http://dx.doi.org/10.3926/oss.13>. ISBN 9788494211836.