

Course guide

310514 - 310514 - Production Management in Construction

Last modified: 15/05/2023

Unit in charge: Barcelona School of Building Construction
Teaching unit: 732 - OE - Department of Management.

Degree: MASTER'S DEGREE IN BUILDING CONSTRUCTION MANAGEMENT (Syllabus 2015). (Optional subject).

Academic year: 2023 **ECTS Credits:** 5.0 **Languages:** Spanish

LECTURER

Coordinating lecturer: Lourdes Perpiñán Pérez

Others:

PRIOR SKILLS

Numerical ability.
Utilization of calculus software.
Analytical ability.
Innovation and teamwork.

REQUIREMENTS

Engineering notions.
Calculus and algebra notions.

TEACHING METHODOLOGY

Theoretical classes where the professor will teach the theoretical and practical contents of the subject.
Practical class: The students, in work groups, must solve the problems explained at class and expound them in front of the class.

LEARNING OBJECTIVES OF THE SUBJECT

Provide to the students the bases of the industrial organization, taking into account theoretical and practical scenarios

STUDY LOAD

Type	Hours	Percentage
Hours medium group	5,0	4.00
Hours large group	15,0	12.00
Self study	90,0	72.00
Guided activities	10,0	8.00
Hours small group	5,0	4.00

Total learning time: 125 h

CONTENTS

Programming and planning of singular projects

Description:

Methods utilized for the planning and planning of projects.

- Project (definition, examples and cycle of life).
- Schedule of activities.
- Restrictions (causes, typologies, nomenclature and formalisation).
- Definition, representation and examples of potential problems.
- Definition, representation and examples of compound problems.

Full-or-part-time: 8h

Theory classes: 4h

Practical classes: 4h

Operations planning

Description:

To know the differences between the different plans of production (aggregated or more detailed).

Apply the different methods of calculation.

Know the concepts of planning, supplies, calculation of needs.

Content:

- Master plan of production.
- Aggregated planning: models and techniques for the resolution and examples.
- Detailed planning: list of materials, matrix of type quantities, MRP and examples.

Full-or-part-time: 8h

Theory classes: 4h

Practical classes: 4h

Operations management

Description:

Brief introduction to the management of transactions.

- Productive system.
- Production, business and market.
- Classification of the productive systems.
- Decisions in the productive systems.
- Logistical and management systems.

Full-or-part-time: 2h

Theory classes: 2h



Planning and control d'estocs

Description:

Vision of the deterministic model of management of stocks.

- Concept and classification of stocks.
- Associated costs to the management of stocks.
- Management of stocks by point of order and regular provisioning.
- Harris-Wilson model.
- Uniform sales.
- Multiple items subjected to a restriction.
- Non-homogeneous demand.

Full-or-part-time: 8h

Theory classes: 4h

Practical classes: 4h

GRADING SYSTEM

Continuous evaluation about the practical exercises which will be worked at class (25%).

Midterm exam (25%).

Final work (50%).