

## Designing Operations Systems

UGRA\_002732

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Departments	Dept. of Operations, Innovation & Data Sciences
Teaching Languages	English
ECTS	4
Teacher responsible	Sancha Fernández Cristina - cristina.sancha@esade.edu Alguero Redonnet Ignasi - ignasi.alguero@esade.edu

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### Course Goals

On completing this course students should:

1. Understand the Operations function as an area in organisations that transforms inputs into outputs and thereby generates value for the end customer.
2. Be familiar with the current focus on Operations management, which includes innovation, production, logistics and quality.
3. Learn how Operations can generate value in industrial and service companies through greater efficiency, quality, product and/or service innovation, etc.
4. Understand how to define an Operations strategy on the basis of a competitive strategy.
5. Be aware of the existence of methods and tools developed through research to solve problems and know how to use them.
6. Know how to model complex organisational systems and apply methods and tools that enable finding the optimal solution for planning problems in operations, service design and improvement and, finally, project planning and control.
7. Take full advantage of the results obtained and use them as the basis for management and/or strategic decision-making.

### Previous knowledge

There is no prior knowledge

### Prerequisites

There are no prerequisites

### Teaching methodology

The subject adopts a hands-on approach and includes the presentation of theoretical frameworks, case discussions, exercises resolution and challenges among others.

### Description

### Course contribution to

The course contributes to the programme by ensuring that students:

## program

1. Master the basic language related to the business world, introducing the fundamental concepts and tools for Operations management.
2. Develop the necessary skills that enable them to form both a comprehensive and general vision of organisations and the environment in which they operate beyond their functional aspects.
3. Develop an analytical capacity and systemic vision of complex organisations in order to undertake business modelling and search for the best solution for an organisation when understood as a whole.

## Bibliography

Krajewski, L.; Ritzman, L.; Malhotra, M., Operations Management: Process and Supply Chains, Pearson (Book)

## Activities

Analytical exercises

Written and/or oral exams

Teamwork

Quizzes/tests

Group presentations

Readings

Presentations

Interaction with visiting guest professionals

Project development and presentation

Projects with companies and consulting projects

Case study analyses

## Content

#	Topic
1	Introduction to Operations
2	Operations strategy
3	Operations process decisions
4	Process Analysis
5	Capacity Decisions
6	Waiting Lines
7	Outsourcing decisions
8	Location decisions
9	Project Management

## Assessment

Tool	Assessment tool	Category	Weight %
Written and/or oral exams		Ordinary round	50.00%
Group project		Ordinary round	15.00%
Teamwork with companies or other organizations		Ordinary round	15.00%
Quizzes/tests		Ordinary round	10.00%
Other		Ordinary round	10.00%
Written and/or oral exams		Retake	50.00%
Group project		Retake	15.00%
Teamwork with companies or other organizations		Retake	15.00%
Quizzes/tests		Retake	10.00%
Other		Retake	10.00%

## PROGRAMS

BBA20-Bachelor of Business Administration (BBA) (Undergraduates: Business)  
BBA20 Year 2 (Mandatory)

BBA23-Bachelor of Business Administration (BBA) (Undergraduates: Business)  
BBA23 Year 2 (Mandatory)

BBE20-Bachelor of Business Administration (BBA) (Undergraduates: Business)  
BBE20 Year 1 (Mandatory)  
BBE20 Year 2 (Mandatory)

DBAI21-Double Degree in Business Administration and Artificial Intelligence for Business (Undergraduates: Business)  
DBAI21 Year 3 (Mandatory)

DBAI23-Double Degree in Business Administration and Artificial Intelligence for Business (Undergraduates: Business)  
DBAI23 Year 3 (Mandatory)