

# Transforming and competing through operations

**Master's Degree:** Business Administration

**Subject:** Strategic Management

**Credits:** 6 ECTS

**Program:** International MBA - Barcelona - Boston

**Modality:** On-campus (Full-Time) / Hybrid-Learning

**Semester:** Second

**Type:** Mandatory

**Language of instruction:** English

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## 1. Presentation

Operations and their management within the company, both in the supply chain (SC) and outside it, have a direct impact on costs and an indirect impact on revenue, which in turn impacts profitability and profitability. competitiveness of the company in the short and long term.

Technology is a key factor that allows operations to increase their efficiency and effectiveness. Technological advances in various areas can help companies improve their competitiveness, as long as managers understand these technologies, their application and management appropriately.

Currently, technologies related to industry 4.0, particularly those related to data and its use for automation, prediction and optimization of decisions in operations, have reached a level of maturity and reliability that allows their application in companies of any type, as long as the value that these technologies can bring is first understood.

Within the scope of this subject, the various most important and key technologies that are applied in companies in QoS and operations will be reviewed, understood and even practiced, from a technological and managerial perspective, in order to make better decisions through descriptive, predictive or prescriptive analyses, automating processes and using artificial intelligence, with the aim of improving business competitiveness.

The CoS strategy, its formulation and evaluation, as well as its alignment with the corporate strategy, will be analyzed.

It will address the role that sustainability plays in business operations and how a strong focus in this area can become a competitive advantage. Finally, the concept of resilience will be explored in order to develop robustness in the supply chain.

## 2. Program's learning outcomes

The program-related learning outcomes are distributed as follows:

### 2.1. Knowledge

- RAT 1 The graduate will be able to organize information and data as key elements for decision-making problems in the business environment.
- RAT 2 The graduate will infer management methods and techniques applicable to business management, through simulations and case studies.

## 2.2. Skills

- RAT 8 The graduate will be able to provide clear and precise explanations of any knowledge/information, both orally and in writing, in Catalan, Spanish and a third language, particularly English.
- RAT 9 The graduate will be able to apply digital technologies (at the right time) in their field of expertise.
- RAT 12 The graduate will know how to organize time in order to improve their personal and team effectiveness within the framework of business organizations, their environment and their management.
- RAT 14 The graduate will be able to develop people and talent retention strategies that enable companies to obtain long-term competitive advantages.
- RAT 17 The graduate will be able to classify business performance indicators for statistical analysis using statistical measurement and data collection tools.
- RAT 18 The graduate will be able to identify the client's needs for the implementation of a strategy based on data analytics.

## 2.3. Competences

- RAT 20 The graduate will be able to propose innovative, creative and entrepreneurial solutions in situations specific to the professional field.
- RAT 21 The graduate will be able to evaluate the sustainability and social impact of the proposals made with ethical, environmental and professional responsibility.
- RAT 22 The graduate will be able to apply the gender perspective in tasks specific to the professional field.
- RAT 24 The graduate will be able to design integrated management projects in each functional area of the company.
- RAT 25 Graduates will be able to adapt changes arising from international environments to the dynamics of company management by studying real cases.
- RAT 26 The graduate will be able to design integration plans and programs for the cultural diversity of the company and the different operators that interact in its environment.
- RAT 27 Upon completion of the Master's degree, the graduate will be able to design statistical instruments to obtain data relevant to business management.
- RAT 28 The graduate will be able to restructure the company's operations using transformation tools to implement a strategy that improves business activity.

### 3. Subject's learning outcomes

The graduate will be able to apply the gender perspective in the professional tasks.

- RAM 5 The graduate will be able to reliably analyze the decision-making process regarding supply chain management problems and policies at the strategic, tactical and operational levels of a business organization by solving practical exercises.
- RAM 6 The graduate will be able to adequately relate the different functional and business areas for the interpretation of the key indicators of business management through the comparative analysis of companies from different sectors.
- RAM 7 The graduate will be able to reliably demonstrate his or her creative capacity in the field of supply chain management and automation and comprehensive logistics management by completing challenges based on real cases.
- RAM 8 The graduate will be able to correctly apply artificial intelligence combined with supply chain management strategies in an integrated manner, considering the technical, commercial, productive, financial and quality implications by carrying out practical cases.

### 4. Contents

- **Topic 1:** Supply Chain and Operations Strategy
  - Basic concepts
  - Planning vs execution
  - Collaboration
  - Operations Strategy: the 4 strategic priorities and their application
- **Topic 2:** Storage and Transportation
  - Logistics, transportation, storage and distribution
  - Modes of transportation (sea, air, land)
  - Inventory management
  - Warehouse management
- **Topic 3:** Robotics and process automation
  - Principles applicable to the automation of processes in the Supply Chain
  - Two cases in the mass consumption retail industry
- **Topic 4:** Demand planning
  - Demand modelling
  - Demand planning process
  - Affected areas
- **Topic 5:** Sales & Operation planning
  - Why S&OP

- S&OP process
- Trend towards Integrated Business Planning (IBP)
  
- **Topic 6:** Demand sensing
  - Prescribe demand to customers
  - Application cases with AI ML
  - Supply chain control tower
  
- **Topic 7:** Production
  - Production process
  - LEAN waste
  - PAP
  - PMP
  - MRP
  - MRP II
  - B.P.S.
  
- **Topic 8:** Purchasing
  - Purchasing strategy: Kraljic mariz and purchasing plan
  - SRM
  - global sourcing
  - Buy in unstable markets
  - e-Procurement
  
- **Topic 9:** Organizational models for the Supply Chain
  - Alternatives for the organization of the supply chain
  - Determination of objectives
  - Organization of functional areas
  - A real case: improving the service level in a large consumer multinational
  
- **Topic 10:** Descriptive and prescriptive analytics applied to the Supply Chain
  - The control panel for controlling operations
  - Descriptive and prescriptive analytics. Value of advanced analytics
  - Techniques: predictive models, mathematical optimizers, discrete simulators
  - Real cases: application to transportation and store supply management
  
- **Topic 11:** New business models
  - A notorious case in the “fast-fashion” sector: Shein
  - How technological aspects have supported Shein's operations strategy.
  - What are the future challenges for Shein's business model.

## 5. Methodology

The methodology applied to this subject, framed within the educational model of EAE Business School, LifEd, is detailed in the following table:

PRESENTIAL MODALITY		
Learning Outcomes	Teaching Methodology	Training Activities
Knowledge	Lecture	Conferences
	Presentation sessions	Student presentations
	Audiovisual-based learning	Analysis of audiovisuals
	Tutorials	Meetings to resolve doubts - Follow-up meetings
Skills	Project work	Problem-solving Information searching and processing Presentation of reports and/or work
	Case-based learning	Information searching and processing Problem-solving
Competencies	Game-based learning	Challenges
	Inquiry-based learning	Research tasks
	Project work	Report preparation - Presentation of reports or work

## 6. Grading system

Continuous assessment

Grading system	Weight
Block 1: Exercises, Problems, Report Preparation, Assignments, Presentations	40 %
Block 2: Participation and Oral Presentations	20 %
Block 3: Final Evaluation Test	40 %

Block 1 will consist of:

- Two individual evaluable activities. 10% each.
- Two group projects or reports. 10% each.

Block 2 will consist of:

- Participation and oral presentations – 20%.

Block 3 will consist of:

- An exam - 40%.

The final grade for the course will be obtained by weighting the three blocks. The minimum weighted grade required to pass is 5.0.

If the student fails Block 1 or Block 3 (or both) with a grade lower than 5.0, they may retake that block or blocks. This grade will average with the other blocks, and the maximum final grade the student can receive is 5.0.

If the student is unable to attend the initial evaluation, and can provide a justified reason (see regulations of the University of Lleida), they may take the exam on the date set for recovery.

Students who do not attend evaluative activities with a weight exceeding 50% will receive a general course grade of "Not presented."

#### Alternative Evaluation

The single evaluation consists of a single exam that accounts for 100% of the course. The exam, and therefore the course, is passed with a grade of 5 out of 10 in this final test. If a grade lower than 5.0 is obtained, the student has the right to a recovery exam.

To opt for the single evaluation, it is necessary to send a written request to the coordination during the first 15 business days of the course. The procedure to follow to opt for this single evaluation is established in the specific rules of EAE.

Plagiarism is a fraudulent activity that can lead to severe penalties, both academic and legal. Academic honesty is one of the pillars of the educational commitment of the School, and the members of its teaching community are especially aware and prepared to detect such actions. Given the difficulty often involved in conceptualizing plagiarism, it has been deemed appropriate to clearly define its content and scope in these regulations and policies.

Plagiarism is understood as the appropriation of works or other people's work by passing them off as one's own; that is, without explicitly crediting their origin. Plagiarism can consist of the unauthorized total or partial copying of someone else's work, or presenting the copy as an original work, impersonating the true author. Some examples of plagiarism are:

- Submitting someone else's work as if it were your own, regardless of whether the copy is total or partial.
- Paraphrasing a text by rephrasing it with other words, but making small changes in the language to disguise it and without citing sources.
- Buying or obtaining a work and presenting it as one's own.



- Relying on an idea or phrase from another person to write a new paper without citing the author of the work.

As established in Article 10 of the Academic Code of Conduct for Students at EAE Barcelona, without prejudice to the academic sanctions resulting from its application, the Academic Commission will promote the legal actions that correspond in case plagiarism could violate applicable regulations regarding intellectual property.

## 7. Bibliography

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