MSc in Business Excellence: First semester courses (detailed description)

Course Title: Lean Management

Duration (hours): 45/4 ECTS Credits

Objectives

In a context of intense internationalization, commercial ubiquity, exponential growth in communication and digital acceleration, understanding and anticipating trends are essential skills for remaining competitive.

More than ever today, companies must cope with complexity and must continuously improve their processes, tools, performance, and anticipate digital disruptions to make a difference, stay ahead of the competition or simply survive.

What are the critical ingredients for a successful digital transformation? What does process improvement initiatives through lean management bring to the equation? How can we effectively support the disruptive innovations emerging in today's complex organizational environment?

Course content

- 1. Introduction to Lean Management.
- 2. Business processes transformation fundamentals.
- 3. The rationale for change.
- 4. Leading change: methodologies and practices.
- 5. Business process transformation: BPM, Lean, Six Sigma, so what?
- 6. Exploring process optimization: a business game.
- 7. Managing obstacles: the role of enforcement.
- 8. Marketing change issues and their implications for BDMP and operations.

Bibliography/Webography

Materials are available on the Moodle platform: course notes, case studies, and videos. Additional lectures, videos, and academic and professional articles are available on the course page of the Moodle platform.

Course Title: Strategic Management

Duration (hours): 45/4 ECTS Credits

Objectives

To impart the fundamentals of corporate strategy, by providing students with both theoretical bases and practical tools (business model, reading grids, matrices, etc.). They will also be made aware that multidisciplinary skills are indispensable. In this course, students will learn to analyze a situation related to the digital revolution and to reflect on possible strategic choices to be implemented.

Course content

- 1. Environment for strategic decision-making: the external and internal environment of the company.
- 2. Strategic diagnosis of the company.
- 3. Strategic diagnosis of the competition.
- 4. Legal and environmental constraints.
- 5. Implementation of a strategic plan.
- 6. Evaluation of a decision and strategy review.

Bibliography/Webography

Materials are available on the Moodle platform: course notes, case studies, and videos.

Reference book:

Strategic Management. David and David.

Additional material:

Academic and professional articles on the course themes:

- Bower et al., 2011. Global Capitalism at Risk. What Are You Doing About it? Harvard Business Review. September. pp. 105-112.
- Porter. 1996. What is strategy? Harvard Business Review
- Porter and Kramer. 2011. Creating Shared Value. Harvard Business Review

MSc in Business Excellence: Second semester courses (Detailed description)

Specialization: Lean Operations Management

Course Title: Lean Six Sigma

Duration (hours): 30/3 ECTS Credits

Objectives

This course presents the fundamental principles of Lean Six Sigma that guide modern approaches continuous to improvement for the industry, government, and other organizations. Lean originated in **J**apanese automotive industry, particularly Toyota, and focuses on creating value through the continuous disposal of waste. Six Sigma is a quality system developed by Motorola that focuses on eliminating variation in all processes. The basic principles have been applied to a wide range of organizations and sectors to improve quality, productivity, customer satisfaction, employee satisfaction, time to market, and financial performance.

Course content

- 1. Lean thinking
- 2. Basics of value stream mapping
- 3. Basics of the Lean supply chain
- 4. Basics of Lean engineering
- 5. Basics of Six Sigma
- 6. Simulation game: a case study of a pharmaceutical company

Bibliography/Webography

Materials are available on the Moodle platform: course notes, case studies, and videos. Additional lectures, videos, and academic and professional articles are available on the course page of the Moodle platform.

Course Title: Design Thinking

Duration (hours): 30/3 ECTS Credits

Objectives

The course is mainly focused on developing students' innovative and entrepreneurial spirit. They will be able to identify and present the introduction of new products and services. In particular, students will be able to understand and demonstrate their knowledge of innovative solutions and implement them as part of the learning process. Students will be able to evaluate the positive and negative impact of the different proposals. They will be able to imagine a creative or new solution taking into account the maximum number of positive impacts while reducing the negative impacts. Participants will be evaluated through the feedback system. Conceptual thinking contributes to the students' entrepreneurial spirit through the planning of collective phases to lead the design thinking challenge. The main objective is to develop and improve an entrepreneurial project. Students will be able to work together towards a common goal to find relevant solutions that create a positive impact on a specific business or social problem.

Course content

- 1. Definition of design thinking
- 2. Discovery learning: learning from observation and extreme situations
- 3. Learning: interviewing and empathy
- 4. Interpretation: defining the objectives
- 5. Creative thinking: create a description of a concept
- 6. Experimentation: prototyping

Bibliography/Webography

Materials available on the Moodle platform: course notes, case studies and videos.