

IH.2403 – Enterprise Issues and Challenges

General information

Module Title: Enterprise Issues and Challenges Module ID: IH.2403 Module leader: Théodor FELEZEU ECTS: 4 Average amount of work per student: 90 hours, including 28 face to face Teamwork: yes Keywords: strategy, management, projects, innovation, customers, negotiation

Presentation

After discovering the company, its context and its organization in the 1st year of the ISEP Digital Engineering cycle, the aim here is to place students at the heart of the company's issues and challenges. They will thus understand the complexity of topics related to strategy and management, broken down at the level of systems, organizations, entities, teams and projects. Innovation, which is a major challenge for the company, will also be discussed. Finally, the module includes a focus on negotiation and the importance of adopting a "customer-oriented" approach, key skills in business. The themes addressed are:

- Strategy and management in companies;
- Project management;
- Innovation management;
- Negotiation;
- Customer relationship and orientation.

Educational objectives

Link with the Isep competency framework

Specialized skills

- Knowing how to act in project mode:
 - Knowing how to act as a project owner: General formalization of the needs that the project must meet / Functional specification of needs in relation to end users: "business model" / Project management: Establishing and implementing a management method; coordinating tasks and all stakeholders for the sake of efficiency and optimization of project costs; ensure that users are properly trained.

Transversal skills

- Know how to act as a responsible professional concerned with strategic issues:
 - Demonstrate rigour, act with professional probity and intellectual honesty
 - To imagine the complexity of the company and its environment and to act accordingly
 - Managing the societal aspects related to the production and design of technological objects
 - Demonstrate critical thinking skills
 - Be sensitive to sustainable development
- Knowing how to act as a dynamic and effective player in a group
 - Work as part of a team, in a network, and in a culturally diverse environment
 - Leading a team, motivating it and helping it evolve
 - Managing conflict, diversity and differences

- To be a force of proposal.
- Knowing how to act as a good communicator in a scientific and technical environment open to the world:
 - Listening and being heard
 - Conducting a dialogue, arguing and convincing
 - Document in an efficient and easily usable way, regardless of the intended audience, the activities carried out or the products produced
 - Have a communicative approach adapted to the situations envisaged, transparent and effective for its employees.

More specifically...

- Understand the challenges of innovation in business, "customer orientation" and negotiation.

Prerequisite

- Concepts of the "Company Environment and Organization" module of the 1st year of the Engineering cycle

Content/Program

Concepts

- Strategy and Management (8h): understanding the company, its values and strategy, the organization, management and leadership, knowing how to motivate and involve, knowing how to communicate, decentralize decision-making, delegate responsibilities, manage men and women, build a team
- Project management (8h): master the specificities of project management in an innovative environment, balancing costs, quality and deadlines, steering vs management, key success factors, scoping / objectives, functional / technical analysis, specifications, task planning, risk management, agile project methods
- Innovation management (6h): know the concepts of innovation vs. invention, two approaches to innovation, environments (ecosystems, domains, companies, projects, roles), key elements (vision, strategies, processes, means), situational simulation (launch of an innovative service)
- Negotiation (4h)
- Customer orientation (2h): understanding the customer experience and loyalty (feedback from an ISPP graduate)

Tools used

- Matrix organization vs. projects
- Maslow's pyramid
- Levers of leadership / motivation
- MOA vs MOE
- Triangle of costs – quality – deadlines
- QQQQCPC Framing
- SMART Goals
- SWOT Matrix
- OBS / PBS / WBS Structural Analyses
- PERT / GANTT chart
- FMEA Method
- ICHIKAWA Diagram
- Causal & effectuale approaches to innovation
- Top Down / Bottom Up
- Blue Ocean
- Disruptive innovation

- Open innovation
- Business Model Canvas
- Minimum viable product
- How an innovation process unfolds

Subsequent mobilizations at ISEP

- The courses taken in this module are a prerequisite for the management modules that are taken in the 3rd year of the Engineering cycle.
- Obtaining good results in this module is strongly recommended for courses of the "engineer-manager" type (double degree AUDENCIA), entrepreneur

Pedagogical methods

Learning methods

- Lectures / PowerPoint presentations
- Practical application through tutorials / exercises and work in project groups / project monitoring
- Feedback from an ISEP graduate
- E-learning

Evaluation methods

- Strategy and management: strategic and managerial analysis carried out in groups – 35%
- Strategy and management: reflection work on an innovation project carried out in a group – 30%
- Project management: e-learning modules, peer-coaching exercises, project management framework note – 35%

Language of work

- English

Bibliography, Webography, Other sources

- Management de l'entreprise / Raymond Leban (Editions d'Organisation)
- Management, the essentials of concepts and practices / Stephen Robbins, David de Cenzo (Pearson)
- Project management – Fundamentals, methods, tools / Jean-Claude Corbel (Eyrolles)
- The keys to the future / Jean Staune (Plon)
- Blue Ocean Strategy / W. Chan Kim, Renée Maubeuge (Pearson)
- The Innovator's Dilemma / Clayton Christensen (Popular economics)
- Open Innovation: The New Imperative for Creating and Profiting from Technology / Henry Chesbrough (HBS Press)
- Business Model Generation : A Handbook for Visionaries, Game Changers, and Challengers / Alexander Osterwalder (Strategyzer)
- Lean startup / Eric RIES (Crown)
- The Purple Cow / Seth GODIN (Maxima)
- Book of Ideation, The Tetra Pak Way / Sven Andren (Googol)
- The guide to high-tech startups / Olivier Ezratty
- Startup backpack, tools and good plans for business creation (La petite étoile)

Multimedia:

- Inventing one's life – HEC Conference, Jacques Attali (video excerpts)
- South Korea – News TV, Arirang News (video)
- French Tech – Xerfi presentation, Olivier Passet (video)

- Biomimicry – EESC presentation, Idriss Aberkane (video excerpts)
- Disruptive innovation – Blog, Philippe Silberzahn (blog)
- Innovation, startups – Olivier Ezratty (blog)
- Maddynews, the news of French startups (blog)

Examples of brands / companies: Renault, Alcatel-Lucent, Altice, Nespresso, Nintendo Wii, Sony Aibo, Orange Bi-Bop, Google Glass, Airbnb, Netflix, Easyjet, Amazon, Starbucks, Gleeden, Uber, Facebook, Alibaba, Apple, Oculus