

Strategy and Innovation UFR Management

1. Place in the curriculum

The course is taught in the Master 1 year and is dedicated to students in the Commercial Engineer program.

The course contributes to the specific Learning Objectives for Commercial Engineer Students: to acquire the knowledge and skills to engage in a professional management position building on a dual expertise necessary for innovation management : strategic management and technology/sciences specialization.

It covers 5 ECTS. Half of these credits are dedicated to lectures (2hours/week during one semester), the other half is dedicated to an individual or group project where students would work on innovative solutions for companies).

2. Objective

The course main objective is to develop the role of innovation in strategy, enabling the student to operationally manage the innovation process with a responsible perspective.

The objective of the course is therefore also to provide the necessary knowledge background to think and act strategically, and to develop a personal perspective on innovation strategy in a corporate and societal context.

The course connects and builds on the specific education tracks for Commercial Engineering Program : on one side, operational management proficiency and, on the other side, quantitative methods or sciences and technology acquired knowledge.

3. Content

The course addresses and integrates all the relevant topics enabling the student to understand the tools and techniques covering the different stages of the strategy development, strategy decision and strategic change.

Innovation is the core of the course but needs to recognize the complexity of executive management. It is therefore positioned among the many dimensions of a broader approach to strategy.

The course integrates the different angles of managing innovation : creativity, technology trends, R&D organization, legal or ethical dimensions, business performance and sustainability, proprietary versus open innovation,...

Innovation is analyzed in the various segments of activities (global corporation, SMEs, public sector, not-for-profit, scientific and technology,...).

The course covers four parts :

1. Corporate strategy as a challenge, as a mindset, as a process
2. Innovation strategy: types of innovation, innovation impact, innovation processes
3. Innovation research in a specific industrial or societal context
4. Innovation workshops : practicing innovation

The course includes class lectures, operational management experience sharing, personal research, and team project enabling the students to meet the objectives of the course and to be evaluated accordingly.

4. Learning Outcome

On successful completion of the course, the students will be able to :

- Understand the components, as well as their interconnection, of innovation in strategy development;
- Recognize the management tools contributing to innovation strategy development;
- Master all concepts of strategic thinking, strategic choices and strategy execution; and the professional vocabulary;
- Deepen awareness of issues and trends confronting business development and innovation (economic and technology, political and social, business and societal, management and ethical related issues and trends);
- Develop a personal and operational ability to manage an innovation process, using the diversified information sources and relevant tools and techniques ;
- Ability to bridge theories and realities of innovation strategy in today's environment;
- Capacity to develop a critical perspective on business strategy and innovation management ;
- Capability to communicate in a structured way strategic analysis and personal perspectives on strategy & innovation issues and trends.

5. Prerequisites

This course is accessible to Commercial Engineering master students having obtained a bachelor in the same area.

A level in English sufficient for an active participation and understanding is required
Business level reading and writing skills in English are necessary

6. Evaluation

The evaluation will be based on an examination as well as a personal or team project based on the criteria in line with the learning objectives here above.