MGT-425

Strategic management of innovation

Piveteau Laurent-Dominique

Cursus	Sem.	Type
Life Sciences Engineering	MA1, MA3	Opt.
Management, Technology and Entrepreneurship minor	H	Opt.
Managmt, tech et entr.	MA1, MA3	Opt.

Language of teaching	English
Credits	4
Withdrawal	Unauthorized
Session	Winter
Semester	Fall
Exam	During the semester
Workload	120h
Weeks	14
Hours	**3 weekly**
Courses	3 weekly
Number of positions	

It is not allowed to withdraw from this subject after the registration deadline.

Summary

The purpose of this course is to describe innovation and how it impacts business dynamics. It also aims to teach students how to think strategically and holistically about technological innovation, new product development and market deployment.

Content

- **Dynamics of Technological Innovation**
  - Innovation and Strategy
  - Exploration vs Exploitation, Standards and Design Dominance
  - Platforms and Double-Sided Markets
  - From Innovation to Market - Diffusion, Timing of Entry

- **Thinking Strategically**
  - Defining Strategic Direction
  - Business Model and Business Model Innovation
  - Intellectual Property - Protecting Innovation
  - Collaborations and Open Innovation
  - Disruption / Blue Ocean Strategy

- **Implementation Aspects**
  - Operational Management of New Product Development
  - Selecting Innovation Projects
  - Organizing and Manging Innovation Teams
  - Financing Innovation

Keywords

Innovation management, strategy, market access, product development, business model, disruption, market analysis, IP strategy

Learning Prerequisites

Required courses

As this course approaches innovation from a strategic point of view, other more specialized courses in intellectual property management, marketing, innovation management or entrepreneurship are excellent complements.

Important concepts to start the course

A group inscription within the first 2 weeks of the course is mandatory for the team project. The expected group size is 6 students/group.

Learning Outcomes

By the end of the course, the student must be able to:

- Assess / Evaluate a market and justify your analysis.
- Assess / Evaluate a market opportunity in a global way
- Apply tools and techniques to structure your reasoning
- Transpose concept into a real world situation
- Analyze an innovation strategy and elaborate alternative scenarios
- Present and defend your position in front of your peers
- Critique alternatives constructively and justify your position

Transversal skills

- Set objectives and design an action plan to reach those objectives.
- Demonstrate the capacity for critical thinking
- Manage priorities.
- Access and evaluate appropriate sources of information.
- Collect data.
- Make an oral presentation.
- Plan and carry out activities in a way which makes optimal use of available time and other resources.
- Communicate effectively, being understood, including across different languages and cultures.

Expected student activities

- Attending lectures
- Preparing classes and case studies
- Debating/arguing
- Reading written material
- Doing and presenting a group project

Assessment methods

- Case Studies (to be submitted during the semester) : 10%.
- Team Project (analysis document, poster and presentation in class): 40%.
- Individual written exam at the end of the semester: 50%.

Supervision

Office hours	No
Assistant.e.s	Yes
Forum	No

Resources

Bibliography

M.A. Schilling, Strategic Management of Technological Innovation, 7th Edition, McGraw-Hill (2023)

Ressources en bibliothèque

- Find the references at the Library

Moodle Link

- https://go.epfl.ch/MGT-425