EPFL

MGT-411	**Innovation management**
	Peters Tilo

Cursus	Sem.	Type
Management, Technology and Entrepreneurship minor	E	Opt.
Managmt, tech et entr.	MA2, MA4	Opt.

Language of teaching	English
Credits	4
Session	Summer
Semester	Spring
Exam	Written
Workload	120h
Weeks	14
Hours	**3 weekly**
Courses	3 weekly
Number of positions	

Summary

This is a collection of lectures on "structured innovation systems," codified approaches to stimulating and managing the process of innovation. Some of the systems to be covered may be Design Thinking, Open Innovation, Crowdsourcing, Lean Innovation, and other structured innovation systems.

Content

The intent of this course is to provide the technology manager with a toolbox of methods for approaching different innovation projects. Depending upon the type, method or goal of the desired innovation, an effective manager can implement different systems. Each lecture, or, for more detailed subjects, each set of lectures, will function as stand-alone units. Lectures will cover Design Thinking, Open Innovation, Crowdsourcing, TRIZ, and/or Lean Innovation, among others.
By the end of the course, the student should be able to compare and contrast the various systems and qualify why a given project might be better suited to what innovation system.

Keywords

Innovation management; innovation systems; new product development;

Learning Prerequisites

Recommended courses

MGT-414 Technology & Innovation Strategy

Learning Outcomes

By the end of the course, the student must be able to:
- Compare various innovation management tools and
- Contrast their application in context of the desired outcome.
- Assess / Evaluate the practicability of various innovation tools in relation to the nature of the required innovative outcome.
- Formulate an appropriate innovation management plan.
- Argue in favor of your selected plan.
- Integrate aspects of multiple innovation approaches.
- Specify how innovation systems can benefit the firm.
- Structure an innovation plan.

Transversal skills

- Set objectives and design an action plan to reach those objectives.
- Access and evaluate appropriate sources of information.
- Assess progress against the plan, and adapt the plan as appropriate.
- Plan and carry out activities in a way which makes optimal use of available time and other resources.
- Use a work methodology appropriate to the task.
- Summarize an article or a technical report.
- Demonstrate a capacity for creativity.
- Take account of the social and human dimensions of the engineering profession.
- Respect relevant legal guidelines and ethical codes for the profession.

Teaching methods

Case method, supplemented with lectures, films and external speakers.

Expected student activities

Attend all classes
Read all material assigned for the course
Participate actively in class discussions
Participate in and contribute equally to group assignments.
Read and prepare case studies (individual)

Assessment methods

Continuous assessment combining:
40% Group deliverables
60% Exam during the exam period

Supervision

Office hours   Yes
Assistants   Yes
Forum   No

Resources

Bibliography

A list of readings for each session will be distributed at the beginning of the course.