

MGT-414

Technology & innovation strategy

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

Language of teaching	English
Credits	4
Withdrawal Session	Unauthorized Summer
Semester	Spring
Exam	During the semester
Workload	120h
Weeks	14
Hours	3 weekly
Courses	3 weekly
Number of positions	60

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

Remark

Special schedule. See the MTE website: <https://go.epfl.ch/mte>

Summary

This course focuses on the economic and organizational conditions that shape technological innovation by firms. The intent is for students to learn core concepts that can make innovation initiatives within a firm more successful, and to then apply those concepts to real business problems and cases.

Content

Strategic management differs from other courses in management in that it focuses on the firm as the unit of analysis. Accordingly, the course objectives are threefold: (1) to develop an understanding of how innovations emerge and gain adoption in the marketplace; (2) to gain insights into how firms can transform themselves into effective innovators; and (3) to evaluate strategies and structures that enhance venture success. The course is particularly applicable for students interested in working for, or learning about, technology-oriented companies.

Keywords

Technology
Innovation
Strategy

Learning Outcomes

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

- Understand core concepts for technology and innovation strategy
- Connect concepts to real-world context
- Account for ambiguity and uncertainty in a strategic analysis
- Work with team-members to research and analyze a real-world problem
- Organize and write up a logical argument and explanation
- Verbalize and respond to challenging questions

Transversal skills

- Communicate effectively, being understood, including across different languages and cultures.
- Evaluate one's own performance in the team, receive and respond appropriately to feedback.
- Identify the different roles that are involved in well-functioning teams and assume different roles, including leadership roles.
- Keep appropriate documentation for group meetings.
- Resolve conflicts in ways that are productive for the task and the people concerned.
- Access and evaluate appropriate sources of information.
- Take feedback (critique) and respond in an appropriate manner.
- Summarize an article or a technical report.

Teaching methods

The course will be taught through readings, lectures, discussions, individual research, the analysis of rough drafts, group-organized research, and group presentations. We will analyze real companies in often fast changing environments. Students will be placed in the role of a key decision maker and asked to address issues related to the management of technical and innovative products and services for that firm.

Expected student activities

Perhaps more than any other course at the College of Management, this course will emphasize the importance of logical analysis in a **verbalized** and **written** form. The quality of what you write, and how you write it, will be an important aspect of the course. You will be given constructive criticism along the way on rough drafts that you must submit in advance for review; you will then receive criticism from both the instructor and others in the course, which you should use to improve. Complete mastery of written English is not required for the course (the power of good ideas and rigorous analysis generally outweigh issues of word choice and fluency), but there is a strong written requirement for the course and it is expected that students will (at times) struggle with the difficulties of rigorous writing. Writing is not easy.

Assessment methods

10% Class Participation
 10% Individual Report -## Rough Draft
 10% Comments on Rough Drafts
 20% Individual Report -## Final Draft
 10% Team Project - Presentation
 20% Team Project - Final Report
 20% Final Exam

Supervision

Office hours	Yes
Assistants	Yes
Forum	No

Resources

Virtual desktop infrastructure (VDI)
 No

Bibliography

A reading list will be distributed at the beginning of the course.
 A case packet will be made available online for purchase.

Prerequisite for

