

MGT-414

Technology & innovation strategy

Younge Kenneth

Cursus	Sem.	Type
Digital Humanities	MA1, MA3	Opt.
Energy Management and Sustainability	MA1, MA3	Opt.
Management, Technology and Entrepreneurship minor	H	Opt.
Managmt, tech et entr.	MA1, MA3	Opt.

Language of teaching	English
Credits	4
Withdrawal Session	Unauthorized Winter
Semester	Fall
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.

Summary

Students will learn core concepts that can make innovation projects more successful and profitable, and to then apply those concepts to real business cases of known successes and failures with a focus on the economic and organizational conditions that advance technological innovation by firms

Content

This course introduces the student to the economic foundations of strategic management, and builds on those concepts to analyze the drivers of technological change, the sources of innovation, the role of incentives, the economics of information, the protections of intellectual property, and the importance of network effects and economies of scale. Building on the core concepts, the course then examines the strategic tradeoffs made by innovating companies related to decision making under uncertainty, tolerance for failure, the development of firm-specific human capital, the development of corporate culture, the timing of first-mover advantages and disadvantages, financing decisions, and alternative modes of competition and cooperation, including technology alliances, joint ventures, and corporate venture capital. Accordingly, the course objectives are three fold: (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.

Learning Outcomes

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

- Identify and evaluate strategies and structures that are more likely to lead to success
- Apply theory and best practices for assessing the potential for new ideas to convert into new products, technologies and businesses
- Apply different theoretical perspectives on technology strategy and innovation, think creatively about alternative courses of action, and ask insightful 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.

Assessment methods

15%	Class Participation	Individual	Participation is tracked each session
15%	Midterm Exam	Individual	Exam is given in a regular class session
15%	Individual Report	Individual	Due before the start of the final exam
15%	Team Project	Team	Due before the start of the final exam
40%	Final Exam	Individual	Exam is given in a regular class session

Resources

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

MGT-411 Innovation Management