

ENGAGE.EU Certificate Joint Programme in Digital Transformation

Digital Growth and Intellectual Property

Course Syllabus

Dr. Jamal Azzam & Dr. Nicola Mirc 6-7 February 2026 & 13-14 February 2026

Course Abstract

The aim of this course of to introduce students to the challenges of corporate growth in modern digital economies, in particular with regard to accessing and developing digital assets and intellectual property. The course is organized in two parts. A first part focuses on the recent developments of the strategic management of patents in modern digital economies. Participants will discover the emergence and the role of the patent system in modern economies and how technological companies try to protect their innovations and to use their patent portfolios in service of their business strategies in a digital era. It covers internal strategies and ways to organize for managing patent and licensing strategies as well as patenting in collaborative arrangements. A second part addresses then more specifically external growth strategies to access patents but also more generally digital solutions and assets. It addresses in particular the strong increase in technology acquisitions and alliances in past years and introduces students to the particular strategic and organizational challenges that external digital growth induces (i.e. integrating and leveraging acquired intellectual property, transferring knowledge between companies and teams of engineers, implementing co-innovative practices between R&D departments from merging companies, etc.). The course provides students with the relevant knowledge and perspectives to understand the management of intellectual property and growth strategies implemented by firms in modern digital economies. First, the course provides students with a managerial and strategic vision of patents, to raise awareness and inform decision-making in this area. Second, students will learn about managerial and strategic challenges of acquiring patents and digital assets in general and how to address them. After this course, students will understand challenges associated with digital growth and intellectual property and are able to develop strategies to deal with such challenges.



Learning Objectives

Upon completion of this course, the students should be able to

- recognize the recent developments of the strategic management of patents in modern digital economies and distinguish different patenting and licensing strategies
- describe options to protect company's innovations and recommend decisions for patent portfolios with regard to a company's business strategy in the digital era
- identify different digital growth strategies and their objectives
- articulate challenges related to digital growth and appraise managerial solutions to
- address them

Evaluation and Grading

Intellectual Property module (50% of the grade):

In teams of 2, students summarize and discuss an assigned text (assignments are communicated before the first session). Each group individually prepares a two-page summary of the text that needs to be handed-in and shared with the whole participants as well as with the instructor. In addition, each group presents the assigned text for 10-15 minutes (please prepare 1 to 3 slides for that need). Discussing a text means offering a synthetic presentation of the central message (what? why? how?) and making the link with the part of the course that will be covered just before. The due date for the paper to be handed in is for the 2-page summary is about 3 weeks after the first session. Presentations take place in the first and the third session.

Digital Growth module (50% of the grade):

In groups of 4-5, students prepare a 15-20 minutes ppt presentation of their analysis of an assigned company case. All presentations take place in the last session.

Presentations should cover a description and analysis of the digital growth strategy of the case company. For the analysis, students should start from what they learn in the case and complement with facts and information they find on how these companies organize their digital growth strategies (websites, reports, etc.).



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Boudreau, K, L. Jeppesen, M.Miric (2022). Profiting from Digital Innovation: Patents, Copyright and Performance. Research Policy

Miric, M., K. Boudreau, L. Jeppesen (2019). Protecting their digital assets: The use of formal & informal appropriability strategies by App developers. Research Policy

Chesbrough (2003), Open innovation: The new imperative for creating and profiting from technology, Harvard Business School Press, Boston.

Cohen LH., Gurun U.G., Kominers S.D., (2017) Patent Trolling Isn't Dead—It's Just Moving to Delaware, Harvard Business Review.

Foray D. (2004), The economics of knowledge, MIT Press.

Lopez-Berzosa D., Gawer A., Camarillo G. (2016) Navigating the Patent Minefield Through Consortia. MIT Sloan Management.

Merges R. (2004) From Medieval Guilds to Open Source Software: Informal Norms, Appropriability Institutions, and Innovation. Conference on the Legal History of Intellectual Property.

Rivette K.G., Kline D. (2000), Rembrants in the attic: Unlocking the hidden value of patents, Harvard Business School Press.

Scotchmer, S., 2004. Innovation and Incentives. MIT Press, Cambridge, MA.

Somaya, D., Teece, D., & Wakeman, S. (2011). Innovating in Multi-Invention Contexts: Mapping Solutions to Technological and Intellectual Property Complexity. California Management Review, 5347-79.

Somaya, D., & Teece, D., E. Sheshinski, E. Strom and W. Baumol (Ed.) (2007). Patents, Licensing, and Entrepreneurship: Effectuating Innovation in Multi-Invention Contexts. Entrepreneurship, Innovation and the Growth Mechanism of Free-Market Economies Princeton NJ: Princeton University Press.

Pisano G., Teece D. (2007) How to Capture Value from Innovation: Shaping Intellectual Property and Industry Architecture. California Management Review.

Sessions

FIRST SESSION:



Early afternoon: module 1) Intellectual Property – Prof. Jamal Eddine Azzam – session 1 Late afternoon: module 2) Digital Growth – Prof. Nicola Mirc – session 1

SECOND SESSION:

Morning: module 1) Intellectual Property – Prof. Jamal Eddine Azzam – session 2

Afternoon: module 2) Digital Growth – Prof. Nicola Mirc – session 2

THIRD SESSION:

Early afternoon: module 1) Intellectual Property – Prof. Jamal Eddine Azzam – session 3 Late afternoon: module 2) Digital Growth – Prof. Nicola Mirc – session 4

FOURTH SESSION:

Morning: module 1) Intellectual Property – Prof. Jamal Eddine Azzam – session 4

Afternoon: module 2) Digital Growth – Prof. Nicola Mirc – session 4

About the Lecturers

Jamal-Eddine Azzam is Associate Professor and Head of the Master in Innovation Management at Toulouse School of Management (University of Toulouse Capitole, France). He completed his PhD in Management Science at Côte d'Azur University where he also served as Teaching and Research Assistant. He has been an academic guest at ETH Zurich, TIMGROUP (Chair of Technology and Innovation Management) and lecturer at the University of Aix-Marseille. His research focuses on strategy, innovation and patent management and has been published in various journal such as European Management Review, International Journal of Technology Management, Revue Française de Gestion and Management International.

Nicola Mirc is Professor of Strategy at Toulouse School of Management (University of Toulouse Capitole) and member of TSM-Research (CNRS) in France. She holds a PhD in Economics and Business from Ecole Polytechnique (France) and is founding member of the European M&A Institute. Her research revolves around the management of organizational integration in mergers and acquisitions and has been published in journals such as Research Policy, Organization Studies, Human Relations, European Management Review, Social Networks and the Scandinavian Journal of Management.