

CS-410 **Technology ventures in IC**

| Cursus | Sem. | Type |
|-------------------|----------|------|
| Computer science | MA2 | Opt. |
| Data Science | MA2 | Opt. |
| Mineur STAS Chine | E | Opt. |
| SC master EPFL | MA2, MA4 | Opt. |

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|----------------------------|---------------------|
| Language of teaching | English |
| Credits | 4 |
| Session | Summer |
| Semester | Spring |
| Exam | During the semester |
| Workload | 120h |
| Weeks | 14 |
| Hours | 4 weekly |
| Courses | 2 weekly |
| Project | 2 weekly |
| Number of positions | |

Remark

pas donné en 2017-18

Summary

This hands-on class gives graduate students in IC interested in startups the opportunity to learn and put in practice the fundamental skills required to assess a technology concept in the context of a business opportunity. This class is focused only on business opportunities where high-technology

Content

Working in teams, students will learn the fundamentals of:

- *Opportunity assessment*
- *Customer development and validation*
- *Business model alternatives*
- *Intellectual Property*
- *Strategy and Financial planning*
- *Go-to-market, launch, and growth*

This is a hands-on class where students start the class with their own technology venture concept (e.g. the work done as part of their PhD, or some well-formed idea, maybe with a prototype). During the class, they convert their concept into a integrated business plan.

Keywords

Entrepreneurship, startups, technology transfer, intellectual property

Learning Prerequisites**Required courses**

- *None – but available to MS and Ph.D. students only*

Learning Outcomes

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

- Analyze a business plan
- Create a business plan

Teaching methods

- Short ex-cathedra presentations of each topic
- Hands-on seminar with many short student presentations
- Presentations from invited guests, in particular industry executives and entrepreneurs
- Discussion and case studies

Assessment methods

- In-class participation (30%)
- In-class presentations (30%)
- Final pitch (40%)

Supervision

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|--------------|-----|
| Office hours | Yes |
| Assistants | No |
| Forum | Yes |