Summary
This class is the foundational course in entrepreneurial management. This course provides a practical and theoretical overview of the iterative and experimental entrepreneurial process: from opportunity recognition to developing a viable, desirable and feasible business concept.

Content
- Introduction to Entrepreneurship
- Opportunity Identification / Sources of Innovation
- Why Prototype?
- What is a Value Proposition?
- Marketing & Market Entry Strategy / Selecting a Target Market / Technology Commercialization
- Market Sizing
- Entrepreneurial Marketing / Liabilities of Newness & Smallness / Crossing the Chasm
- Business Model Design
- Marketing Metrics & Tactics / Pirate Metrics / Guerilla Marketing / Growth Hacking
- Strategy / Discovery-Driven Planning / Basics of Business Planning
- Introduction to Finance & Fundraising / Sources of Capital / Venture Capital Criteria / Thinking about Valuation
- Building a New Venture Team / Growth and Scalability of Organizations

Keywords
Entrepreneurship, New Firms, Technology Commercialization, Ideation, Prototyping, Lean Startup

Learning Outcomes
By the end of the course, the student must be able to:
- Define different types of entrepreneurship
- Apply creativity techniques that combine divergent and convergent thinking
- List the three factors comprising a successful innovation
- Formulate a resonant, substantiated and differentiated value proposition
- Specify business model mechanisms required to produce, deliver and extract value from your innovation
- Test new cultural, technological and market-related trends and assumptions key to producing, delivering and extracting value from your innovation
• Design market entry strategy for innovative offers (evaluate potential markets, select initial target market segment, estimate annual spend of target markets)
• Develop a strategy for obtaining required resources and funds
• Defend the overall chosen strategy for pursuing a new venture opportunity

Transversal skills
• Continue to work through difficulties or initial failure to find optimal solutions.
• Identify the different roles that are involved in well-functioning teams and assume different roles, including leadership roles.
• Assess one’s own level of skill acquisition, and plan their on-going learning goals.
• Evaluate one’s own performance in the team, receive and respond appropriately to feedback.
• Plan and carry out activities in a way which makes optimal use of available time and other resources.
• Demonstrate a capacity for creativity.
• Communicate effectively, being understood, including across different languages and cultures.
• Access and evaluate appropriate sources of information.
• Make an oral presentation.
• Set objectives and design an action plan to reach those objectives.
• Communicate effectively with professionals from other disciplines.
• Negotiate effectively within the group.
• Resolve conflicts in ways that are productive for the task and the people concerned.
• Respect relevant legal guidelines and ethical codes for the profession.
• Take account of the social and human dimensions of the engineering profession.
• Take responsibility for environmental impacts of her/ his actions and decisions.
• Take responsibility for health and safety of self and others in a working context.

Teaching methods
• Case studies
• Group discussions
• In-class exercises
• Lectures
• Guest speakers (entrepreneurs and investors)

Assessment methods
Continuous assessment combining:

40% New venture project (oral presentations and written report)
20% Classroom participation
40% Individual assignments

Supervision
Office hours Yes
Assistants Yes
Forum No
Others Office hours upon request

Resources
Virtual desktop infrastructure (VDI)
Bibliography

Resources for reading reflection & critique

Session 1: Introduction to entrepreneurship


Session 2: Identifying venture opportunities

• Johnson, S. (2010) "Where Good Ideas Come From" [17 minute TEDTalk] [Transcript - available in 33 languages] [4 minute RSA Animated Video]
• Elon Musk on Innovation (2013) [21 minute conversation at TED] [Transcript - available in 31 languages]

Session 4: Developing a value proposition for your customer


Session 6: Basics of (entrepreneurial) marketing


Session 7: Delivering your value proposition (business model design)


Session 8: Reaching your customer (marketing tactics)

Session 10: Basics of strategy

Session 11: Finance and fundraising

Session 12: Surviving growth & success
• Lieb, D. “10 years ago today, I had the idea for an app.” Twitter. https://twitter.com/dflieb/status/1050990035892199424

Practical resources
Identifying venture opportunities (developing value propositions, discovering customers)
• An Introduction to Design Thinking
https://dschool-old.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP
• Talking to customers
  • https://blog.prototypr.io/design-thinking-how-do-i-talk-to-customers-1c4bb54ae4555
  • https://uxdesign.cc/how-to-nail-a-user-interviews-in-a-ux-hcd-or-design-thinking-process-full-guide-17d4eee8dc3
  • https://webdesign.tutsplus.com/articles/techniques-of-empathy-interviews-in-design-thinking--cms-31219
  • https://www.slideshare.net/evanish/getting-to-product-market-fit?qid=2479e5e7-ae23-46b4-8967-efa96a0c79a5&v=
  • Startup Class (2014) “Lecture 16 - How to Run a User Interview (Emmett Shear)" http://startupclass.samaltman.com/courses/lec16/
  • Blank, S. (2016) “Fast Tab: get in, get fed, get out” https://www.slideshare.net/sblank/fast-tab-columbia/2-WHAT_WETHOUGHT (see also Business Model Canvas Explained from Strategyzer: https://youtu.be/QoAOzMTLP5s)

Marketing basics
  • Market segmentation with Sensable Technologies https://www.youtube.com/watch?v=IPDZFNh73Kw

Marketing tactics (growth)
  • Griffel, Mattan. (2013) Growth Hacking https://www.youtube.com/watch?v=MtUdgRN8Mlk
  • McBennett, James. What I learned from Kickstarter (reward-Based Crowdfunding tips)
  • Del Ponte, M. Hacking Kickstarter: How to Raise $100,000 in 10 days (includes successful templates, emails, etc.)

Finance & Fundraising
  • 4 Reasons to Crowdfund vs. Self-Fund a Product Idea http://www.entrepreneur.com/article/244756
  • Financing your startup business, The Startup Donut http://www.startupdonut.co.uk/startup/financing-a-business/start-up-funding/finance-your-start-up-business
  • Anna Vital -- How Funding Works: Splitting the Equity Pie with Investors http://fundersandfounders.com/how-funding-works-splitting-equity/
  • Collaborative Economy Honeycomb 1.0 [Image]
  • What is equity
    • https://www.youtube.com/watch?v=tcwW0mM4OD4
  • Valuation
Speaking to investors

- LinkedIn’s Pitch to Greylock https://www.reidhoffman.org/linkedin-pitch-to-greylock/
  - The Public Speaking School Youtube Channel https://youtu.be/StfaSgSe3HU
  - Rose, T. (2007) How to pitch to a VC. Video on TED. (15 minutes run time.)
    http://www.ted.com/talks/david_s_rose_on_pitching_to_vcs?language=en
    minutes run time.) https://youtu.be/uWmAX2-vraw
  - Startup Class. (2014) Lecture 19 - Sales and Marketing; How to Talk to Investors (Tyler Bosmeny; YC
  - Social Investment Toolkit http://socialinvestmenttoolkit.com/toolkit-modules/

Social entrepreneurship

  https://techcrunch.com/2015/10/02/impact-is-the-new-mobile/
  https://techcrunch.com/2017/02/14/investing-in-goodbusiness/
- Dillet, R. 2015, June 16. *La Ruche Qui Dit Oui* Scores $9 Million From USV And Felix Capital For Its
  Local Food Marketplace. TechCrunch.

Other resources

- Koudetat startup courses (in French)
  https://www.youtube.com/channel/UCb68flOoUHVz98jUJk5XCSw/videos
- Additional resources: https://blogs.epfl.ch/article/45555
- Newsletter about Swiss tech startups and events. Sign up at: venturelab.ch
- Newsletter about Swiss startups, sustainable development and related events. Sign up at: impacthub.ch
- Newsletter about international startups, deeptech and related events. Sign up at: hello-tomorrow.org

- Newsletter about international deeptech startups and related events up at: http://inno-forum.org/ (see
  also: https://lausanne.inno-forum.org)
- Newsletter about tech startups with US/Silicon Valley focus. Sign up at: vccafe.com
- Newsletter about tech startups with US/Silicon Valley focus by an entrepreneur turned VC, Mark Suster.
  bothsidesofthetable.com
- Newsletter about international tech and finance news. Sign up at: finimize.com
- Newsletter about tech startups with an US focus. Sign up at: angel.co
- Follow new products as they enter the market:
• Product Hunt
• IndieGogo
• Kickstarter
• WeMakeIt

Ressources en bibliothèque
• The entrepreneurial mindset / McGrath
• Entrepreneurial Marketing / Lodish

Websites
• http://Entc.epfl.ch

Moodle Link
• https://go.epfl.ch/envs