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:

• 70% New venture project (New venture ideas presentation: 20% - Marketing and strategy presentation: 20% - Final venture concept presentation: 30% - Final venture concept report: 30%)
• 20% Individual assignment: reflection paper
• 10% Individual assessment: peer to peer feedback (New venture ideas presentation: 50% - Marketing and strategy presentation: 50%)

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

Virtual desktop infrastructure (VDI)
No

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
- Talking to customers
  - https://blog.prototypr.io/design-thinking-how-do-i-talk-to-customers-1c4bb54e4555
  - https://uxdesign.cc/how-to-nail-a-user-interviews-in-a-ux-hcd-or-design-thinking-process-full-guide-17d4e8e8dc3
  - 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/
  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. Growth Hacking: How Startups Grow from 0 to Millions of Users
  https://www.slideshare.net/mattangriffel/growth-hacking (see also: McClure, David. Pirate Metrics.
  https://www.slideshare.net/mattangriffel/startup-metrics-for-irates-long-version)
- 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

- Cash versus Accrual Accounting.
- Three core financial statements.
- Financing your startup business, The Startup Donut http://www.startupdonut.co.uk/startup/financing-a-business/start-up-funding/finance-your-start-up-business
- Zwilling, M. “10 Cash-Flow Surprises That Could Kill Your Startup”
  https://www.entrepreneur.com/article/229048
- Collaborative Economy Honeycomb 1.0 [Image]
- What is equity
• https://www.youtube.com/watch?v=tcPmM4OD4

• Valuation
  • https://www.youtube.com/watch?v=67ZTSm4-4
  • https://thenextweb.com/entrepreneur/2014/02/27/looking-investors-heres-value-startup/
  • https://www.youtube.com/watch?v=u8GPO5bxgC4k
  • https://medium.com/parisoma-blog/valuation-for-startups-9-methods-explained-53771c86590e
  • https://www.thehartford.com/business-playbook/in-depth/determining-business-market-value

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
  https://youtu.be/uWmAX2-vraw
  • Startup Class. (2014) Lecture 19 - Sales and Marketing; How to Talk to Investors (Tyler Bosmeny; YC Partners)
    https://youtu.be/SHAh6WKBgiE [Transcript]
  • 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, deep-tech and related events. Sign up at: hello-tomorrow.org
  • Newsletter about international deep-tech 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