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/ModeGuideBOOTCAM
• 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-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=tcpW0mM4OD4
• 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
  • 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


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](http://Entc.epfl.ch)

**Moodle Link**
• [https://go.epfl.ch/envs](https://go.epfl.ch/envs)