



# High-tech entrepreneurship

## Kick-off & Introduction

Prof. Angelo Cavallo



# ENTREPRENEURSHIP

## The context

# High-tech startups: key figures



**\$ 300.5  
billion**

global VC investments in 2020



**728  
unicorns**

in the global entrepreneurial ecosystem,  
whose combined valuation is estimated at

**\$ 2  
trillion**

having raised a total of \$ 485 B in  
venture capital investments

Most top companies are pursuing **open  
innovation** strategies:



**50%**

of the total investments in startups  
come from **corporate investments**

Sources: CB Insights, 2021; KPMG, 2021; TechCrunch, 2021

# The Politecnico entrepreneurial ecosystem

- **The Entrepreneurship, Finance & Innovation research group at DIG:** prominent research group investigating the organization, financing, strategies and performance of startups; collaborations with leading academic institutions, private firms and public organizations (e.g. European Investment Fund).
- **Polihub:** the **startup's incubator of Politecnico di Milano**, managed by Fondazione Politecnico, supported the fundraising of **€ 28+ million investments** by Italian startups, and is currently ranked among the **top 5 university incubator worldwide** in 2019.
- **Poli360 Fund:** the **Venture Capital Fund** for the development of hi-tech startups of Politecnico di Milano. With an **endowment of € 60+ million**, it is managed by 360 Capital Partners, leading European Venture Capitalist in tight collaboration with Politecnico.





# HIGH-TECH ENTREPRENEURSHIP

A.A. 2024/2025

## Kick-off & Introduction

## Team and contacts



Angelo Cavallo

Professor

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Assistant Professor

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Gwendolyn Torres

Assistant Professor

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# Expected learning outcomes

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- Acquire **interdisciplinary methodological tools** to **design, develop and validate** your **entrepreneurial ideas** and related **business models**
- **“Get your hands dirty”** by working on your own **entrepreneurial ideas**
- Get in touch with **the entrepreneurial ecosystem** and **interact with its main players** (e.g., startups, incubators, crowdfunding platforms, VC funds, corporate innovators),
- Nurture your **entrepreneurial culture** and stimulate your capability to **undertake entrepreneurial innovative endeavors**

# Activities

- **Lectures** by course instructors on methodologies and key issues about starting a high-tech start-up
- **Guest speakers & networking:** practitioners of the entrepreneurial ecosystem (e.g., entrepreneurs, investors, accelerator & incubator managers)
- **Teamwork** on your business ideas
- [Course Schedule](#) can be found on WeBeep



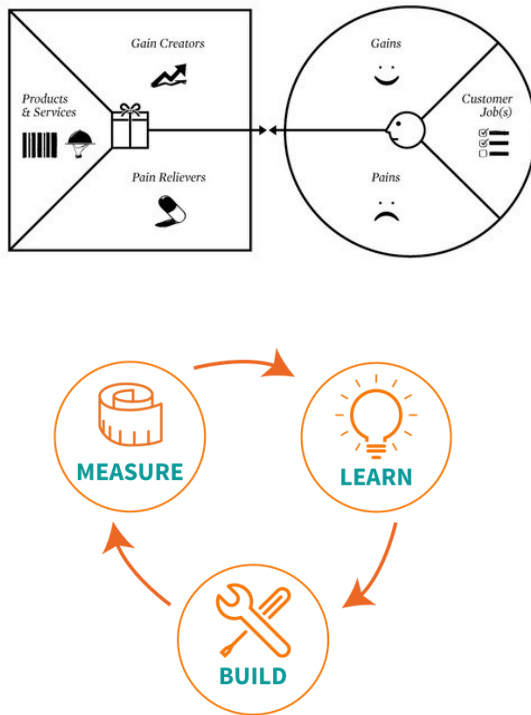
# Content

- Focus on:
  - the design and test of the value proposition &
  - the development of a first draft of the business model of a technology-based start-up.
- Involvement of several leading practitioners (incubator/accelerator managers, venture capitalists, corporate partners) providing you with expert advise for managing the early stages of your startup's development
- The final evaluation of your project will be based on:
  - **A written report** describing the business model of your startup and
  - an **elevator pitch**

# Overview of Project's Objectives

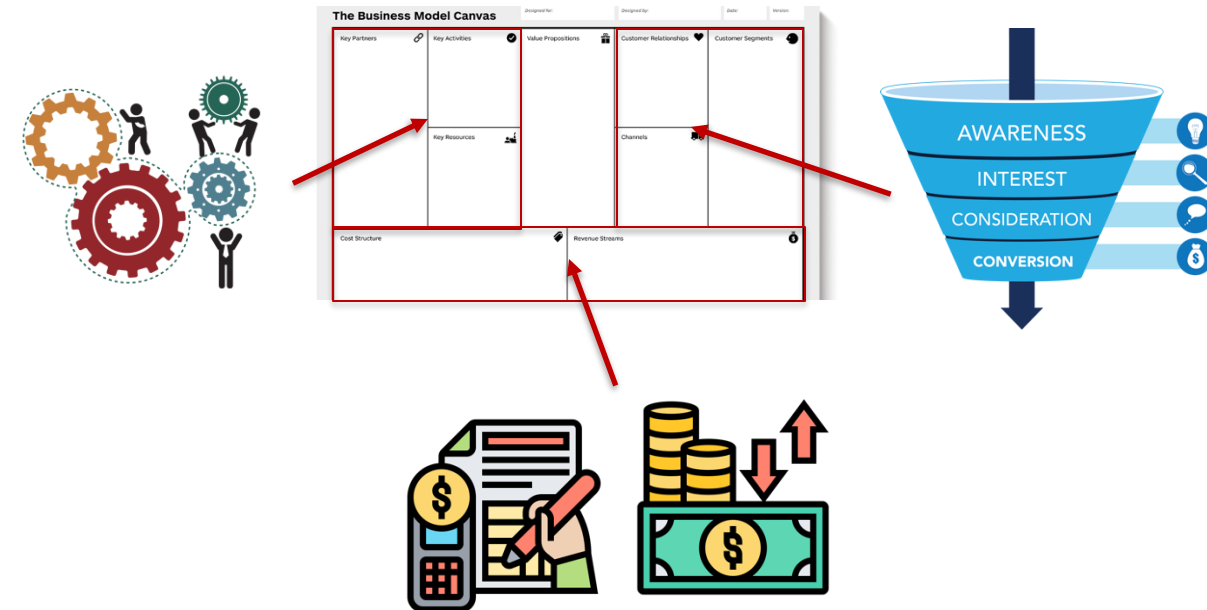
## Part I

*Strategic Analysis, Value Proposition Ideation and Test*



## Part II

*System of activities, required resources, partners, channels, marketing plan, cost structure, revenue streams, required fund, financial evaluation*



# Teamworking: Rules of the Game

- **Teams should be composed of 5-7 students**
  - We encourage:
    - heterogeneity of backgrounds within teams
    - Creation of cohesive teams (conflicts within teams lead to lower grades!).
- **Please list your team by [clicking here](#) → Deadline 12<sup>th</sup> March 11.59 pm (the sooner the better)**
  - Elect a team representative who will be in charge of communicating with faculty etc.
- The appointed **team representative** will manage all communication with the tutors and professors (please check your e-mail @mail.polimi.it address often, or redirect its incoming emails to your personal address)

# Teamworking: activity plan

- By **March 12<sup>th</sup> 11.59 pm** team formation process will be completed:
  - If there are students that couldn't find a team, they will be allocated by professors to a team which failed to reach the full capacity (7 students)
  - Each team will be assigned to a Tutor (Gwendolyn Torres or David Heller)
- Deadline delivery Final Output: June 10<sup>th</sup> 2025 at 11.59 PM
- The Final output includes: i) A Presentation Deck + ii) Video Explainer about your entrepreneurial project ([see Guidelines Deliverables](#) on WeBeep)

The course's final exam consists in the evaluation of:

- **Group Oral presentation of the start-up's business model using the presentation deck**
- **Q&A addressed to each single member of the teams right after the oral presentation**

**Note:**

Each team member is responsible for the overall project, not just a sub-component of it.  
There is no room for free-riding—Q&A sessions can easily reveal a low level of involvement.

- **Final output deliverables: presentation deck and video explainer ([see Guidelines Deliverables](#) on WeBeep)**

**Oral presentation days: 4<sup>th</sup> and 5<sup>th</sup> June (details will follow).**

**Deliverables to be sent by 10<sup>th</sup> of June incorporating feedbacks from the oral presentation**

## Evaluation (2/4)

In the course final exam, students must show that:

- they have a **good understanding of the challenges in creating and funding a new start-up**;
- they understand **the concept of value proposition and business model** and are able to properly build one, tailored to their business idea by using the **value proposition canvas** and business model canvas;
- they know how to effectively **validate the value proposition** in the real world;
- they know how **to analyze from a strategic perspective** the launch of a new business (competitor analysis, SWOT analysis)
- they are able to **summarize and communicate** the key results of their work by creating a pitch and eventually presenting in a public context.

## Evaluation (3/4)

Grades are assigned based on:

- **Methodological rigor in the process of ideation and validation**
- **Accuracy and clarity of the deliverables.**
- **Innovativeness of the business idea**

During the tutoring sessions, as well as in the final exam, students must also show that:

- They are active in class discussions,
- They are able to effectively work in teams,
- They are able to take advantage of the advice provided by the tutors and guest speakers.

# HIGH-TECH Entrepreneurship

## Evaluation (4/4)

Please remember by the end of the course to enroll to the first call: 10/06/2025 (to register your grade)

### *Reject & Resubmit*

As usual at POLIMI, students have the opportunity to reject the grade and to resubmit the project

- Students can resubmit once in every exam session (one **resubmission** in the July-September exam session and one more in the January-February exam session)
- Improvements must be substantial to increase your grade and must be submitted in agreement with Prof. Angelo Cavallo.
- Since there is no possibility of assigning an individual score, for those who want to achieve a higher one there is the possibility of resubmitting the project. The students who accepted the score are not required to help the other teammates.



# Flipped Class

Please watch the following short video clips. They will be discussed next week, on Thursday, 29th February 2024.

- 1 Entrepreneurial team formation: [https://youtu.be/wFoX\\_4r7-Jo](https://youtu.be/wFoX_4r7-Jo)
- 2 Effects of entrepreneurial team characteristics: <https://youtu.be/i8v0c-DphMY>
- 3 The benefits of forming alliance for startups: <https://youtu.be/Zxdfw3KHRyl>
- 4 The risk associated to alliance formation: <https://youtu.be/cup9sLPTkDg>
- 5 incubators and accelerators: <https://youtu.be/I5XAl7qPiOk>
- 6 Entrepreneurial finance ecosystem: <https://youtu.be/e3pyWz4d9zo>
- 7 Sources of external finance and bootstrapping: <https://youtu.be/Vmu-9nRXLIg>
- 8 The theory: <https://youtu.be/iK4EypOydnQ>
- 9 Venture Capital: <https://youtu.be/6ForZZefHX0>
- 10 Crowdfunding: <https://youtu.be/i-NQxQW1epo>

A group of students are gathered around a table in a library, looking at a laptop screen. The background is filled with bookshelves. The text 'Q&A' is overlaid in the center.

# Q&A

POLITECNICO MILANO 1863