

# ADVANCED INNOVATION METHODS

# **Objectives**

The goal of the school is to increase the ability of new entrepreneurs to transform ideas into viable, sustainable and scalable businesses, building up resilience with respect to market turbulence. This implies building up robust business foundations, based on a thorough understanding of strengths and weaknesses.

In this perspective some of the old-fashioned concepts and dilemmas (or myths) surrounding the creation of innovative startups (such as venture capital yes/no, business angels yes/no etc.) will be shown to lack consistency.

The school teaches advanced engineering methods for the design and industrial development of products, for which the prototype phase can be accelerated.

# **Target**

The target population is comprised of undergraduate students, graduate students, PhDs and post-docs, as well as industrial researchers and entrepreneurs, wishing to develop an innovative product in an existing or new company. The target is defined in terms of hard-science, or manufacturing based innovations, i.e. those new products which require some physical testing (with exclusion of Apps or similar kinds of innovative services).

Location: University of Pisa, Polo Porta Nuova - Via Bruno Fedi, 1, 56122, Pisa (PI), Italy.

**Duration:** From May 30th to June 11th

Contact: advanced\_innovation\_methods@unipi.it

## **Opening Event**

Venue: Museo Leonardiano, Piazza dei Conti Guidi, 1, 50059, Vinci (FI), Italy.

Date and time: May 30th, 9-13

Moving from the amazing works of Leonardo da Vinci, towards neural systems and creativity, the main source of innovation will be presented. Ladies

and gentlemen: The Brain.

#### Speakers:

Andrea Bonaccorsi, Scientific Coordinator of the Summer School on "Advanced Innovation Methods" - University of Pisa, Italy Silvestro Micera, Scuola Superiore Sant'Anna and Ecole Polytechnique Federale de Lausanne Pasquale Fedele, Founder and CEO - Braincontrol, Italy

### **Seminars**

Venue: University of Pisa, Polo Porta Nuova - Via Bruno Fedi, 1, 56122, Pisa (PI), Italy.

Date	Time	Topic	Speaker	Affiliation
30 May	14-18	Problem statement and Idea understanding	Gualtiero Fantoni	University of Pisa, Italy
		Formalizing the idea and comparing it with others are the basics to		
		understand the proper path to follow		
31 May	9-13	Pretotyping: Pretotype it!	Leonardo Zangrando	Pretotype it!, USA-Italy
		Pretotyping and testing the idea soon to focus on product/service design		
	14-18	Pretotype it!: Hands On	Gualtiero Fantoni Daniele Mazzei	University of Pisa, Italy
		Understanding how new technologies ease pretotyping activities		
1 June	9-13	Pretotyping: Designing connected devices	Daniele Mazzei	Zerynth, Italy-USA
		Enabling the Python programming language to commercial interactive and		
		connected solutions with a ready to use suite		
	14-18	Designing connected devices: Hands On	Daniele Mazzei	Zerynth, Italy-USA
		Microcontrollers, sensors, actuators and many others: handling electronic		
		pretotyping to deepen your value proposition		
3 June	9-13	Pains and Gains, Value Proposition and Business Modeling	Gabriele Montelisciani	University of Pisa, Italy
		The long journey from pain identification to global level growth		
	14-18	Business Modeling: Hands On	Leonello Trivelli	University of Pisa, Italy
		Think different and try to build the most valuable business model starting		
		from divergent perspectives		

4 June	9-13	Pretotyping: 3D Printing	Carmelo De Maria	Fablab Pisa, Italy
		Rapid prototyping techniques and 3D printing: how to design and produce and test your physical object		
6 June	9-13	Social Capital, Scalability and Global Thinking	Ray Garcia	Buoyant Capital, USA
		How to change the perspective from your small town to the global market		
	14-18	Social Capital, Scalability and Global Thinking: Hands On	Ray Garcia	Buoyant Capital, USA
		Scalability means growth and growth means increased complexity, you need to know how to deal with this		
7 June	9-13	Implementation strategy and business planning	Ray Garcia	Buoyant Capital, USA
		Define your strategy, detail your plan and execute it through an iterative process of tuning		
	14-18	Implementation strategy and business planning: Hands On	Ray Garcia	Buoyant Capital, USA
		Defining a strategy is very difficult, but it is easier than working without having one		
8 June	9-13	Strategic Marketing	Fabio Ancarani	Bologna Business School, Italy
		Understanding and recognizing dynamics, opportunities and threats is a must if you want to success		
	14-16	The Dallara Case Study	Andrea Pontremoli	Dallara Automobili, Italy
		Driving a company is like driving a car: an exercise of putting efforts on the right actuators (while looking at the indicators)		
9 June	9-13	Technology Foresight	Karlheinz Steinmüller	Z-Punkt, Germany
		Anticipating competitors and being aware of trends is not a matter of luck either instinct, try to make it methodical		
	14-16	Technology Intelligence	Riccardo Apreda	Erre Quadro Srl, Italy
		Exploiting technology to strengthen your idea and to widen the business horizons		
10 June	9-11	B2B Sales	Eleni Chioutakou	Fabio Perini Spa, Italy
		Sales are the main goal of every entrepreneurial activity and need to be properly managed to succeed		
		Branding and Product Communication		
	11-18	How to value your brand and create a successful product communication strategy	Pier Bardoni	Things.is, Italy

## Final Pitch

Venue: University of Pisa, Polo Porta Nuova - Via Bruno Fedi, 1, 56122, Pisa (PI), Italy.

Date and time: June 11th, 9-13

Pitch your idea in the most effective way to collect feedback and to improve your business model. A panel of experts coming from both business world and academia will attend the event to provide feedback and challenge you to go further!