

bist
esade

From Science to Business

October 2024

bist
SCIENTIFIC
COMMUNITY

CRG⁹

IBEC⁹

ICFO⁹

ICIQ⁹

ICN2⁹

IFAE⁹

IRB⁹
BARCELONA



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1. About FS2B



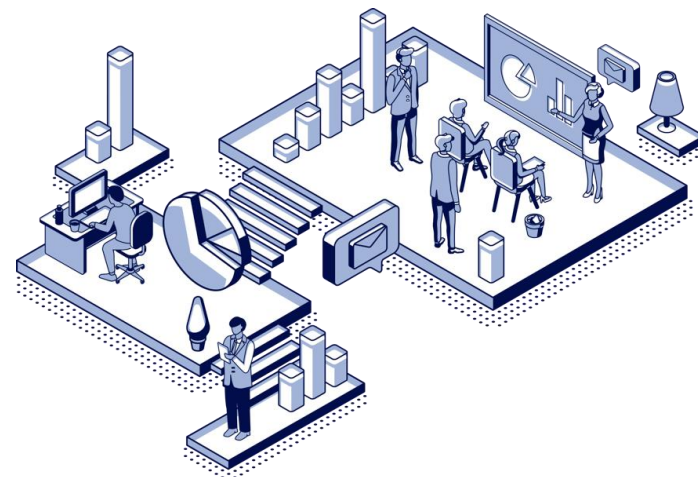
Overview

Today's global economy and businesses are facing a tremendous challenge: how to transform research -the money invested and the resources provided to research institutions- into new innovations to create new products and services that can improve the life of individuals and society as a whole.

One of the main barriers encountered is the “distance” between researchers and the business world. This distance is not usually physical, it is simply a lack of knowledge on both sides.

Minimizing this distance would, without a doubt, **improve the returns to society** on the money invested in R&D.

Involving the scientist behind the invention and/or researchers who decide to pursue a professional career in developing new businesses will significantly increase the odds of a successful new company.



Participants

This programme, delivered by Esade since 2008 (firstly in collaboration with ICFO and, from 2016, with BIST), is aimed at Senior and postdoctoral researchers, staff and graduating doctoral students.

This course aims to **increase the speed of turning innovation and knowledge into new ventures.**

The course, is designed for groups of approximately 30-35 people to ensure optimal participation, learning and faculty-to-participant ratio.



Learning objectives

The From Science to Business programme will prepare participants:

- To **get acquainted with the business world**, and to show how companies create value for society and for themselves: providing more, better and healthier food, a cleaner and safer environment, a higher quality of life, etc.
- To provide a framework to understand **how companies work** and **how they create value** in a competitive environment.
- To **help understand the new venture creation process**, and the role that science/technology plays in it.
- To show that **new venture creation needs scientists and engineers**, and that entrepreneurship can be an attractive career path for them.

Key takeaways

How to find and evaluate business ideas.

- Methods to differentiate between an idea and an opportunity.
- Tools to analyze the environment, the industry and the market to understand the opportunity.
- How to craft and validate a suitable business model.
- The basics of competitive strategy: how to win clients and differentiate yourself from your competitor
- Basic understanding of the interrelationship between science/technology and strategy.
- Understanding financial statements: profit and loss account, cash flow and balance sheet.
- Methods to estimate the capital requirements of the venture: the financial plan.
- Hands-on experience: working on a business opportunity and design a business model for it.

2. Contents and Structure



Contents & Structure

Entrepreneurs Panel

Entrepreneurship

Innovation & Strategy

Entrepreneurial Finance

Project Workshop

- | | | | | |
|--|---|--|--|--|
| <ul style="list-style-type: none"> • Warm up for the programme • Learn from and interact with science and technology entrepreneurs & open participants' horizons • Get to know the other participants | <ul style="list-style-type: none"> • Understand the process of developing and managing a scientific new venture • Learning and practicing how to design and validate a business model for a new science business • Learning how to prepare and use a business plan | <ul style="list-style-type: none"> • Provide a framework to understand the company from a strategic point of view • Provide tools to analyze the general environment • Understanding the role of innovation in framing strategy | <ul style="list-style-type: none"> • Understand the financial needs of a venture • Learn how to develop a Financial Plan, estimate cash flows and determine the financial needs • Get to know the financial resources for a science-based new venture | <ul style="list-style-type: none"> • Put into practice the knowledge acquired during the sessions. • Apply the management learnings in your own project. • Design a science/technology-based start-up using a collaborative methodology |
|--|---|--|--|--|

Schedule 2024

Mon, October 7 ESADE	Tues, October 8 ESADE	Wed, October 9 ESADE	Thurs, October 10 until Wed, October 23	Thurs, October 24 ESADE	Fri, October 25 ESADE
	9:00 – 11:00 Entrepreneurship Prof. Jordi Vinaixa	9:00–11:00 Innovation & Strategy Prof. Xavier Ferràs	Time for groups to work on their projects (By themselves)	9:00 – 11:00 Entrepreneurial Finance Prof. Gloria Battlori	9:00 – 10:30 Project Workshop Prof. M.J. de la Maza & Lluís Pareras
	Coffee break	Coffee break		Coffee break	Coffee break
	11:30 – 14:00 Entrepreneurship Prof. Jordi Vinaixa	11:30 – 14:00 Innovation & Strategy Prof. Xavier Ferràs		11:30 – 14:00 Entrepreneurial Finance Prof. Gloria Battlori	11:00 – 12:30 Final Pitch Prof. M.J. de la Maza & Lluís Pareras
	Lunch	Lunch		Lunch	
15:30 – 17:30 Welcome Event and Entrepreneurs Roundtable Prof. M.J. de la Maza	15:00 – 16:30 Project Workshop (By themselves)	15:00 – 16:30 Project Workshop Prof. M.J. de la Maza & Lluís Pareras		15:00 – 16:30 Entrepreneurial Finance Prof. Gloria Battlori	
17:30 – 18:30 Welcome Reception Prof. M.J. de la Maza	16:45 – 18:00 Project Workshop (By themselves)	16:45 – 18:00 Project Workshop Prof. M.J. de la Maza & Lluís Pareras		16:45 – 18:00 Entrepreneurial Finance Prof. Gloria Battlori	

Location:
ESADE
Av. d'Esplugues, 92-96
08034 Barcelona

Welcome Event & Panel of Entrepreneurs

- This activity will serve as the **programme kick-off**. BIST will invite a selected number of entrepreneurs who will share their stories, their experiences and their vision on start-up creation with the participants.
- The purpose of this activity is to get **inspired by entrepreneurs with science and technology backgrounds**. We will facilitate the interaction with both, the speakers and the other participants.



Entrepreneurship

- This module will focus on two main issues in Entrepreneurship – firstly, the context, in which a scientific venture is established and operates and, secondly, the process of developing and managing a new venture.
- Module contents:
 - Understanding the process of building a science-based new venture.
 - From ‘the idea’ to ‘the opportunity’: assessing the opportunity.
 - Designing a suitable business model for the opportunity.
 - The business plan: how to prepare and use it.

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[Prof. Dr. Jordi Vinaixa](#)

Innovation and Strategy

- This module will provide a framework for understanding the company from a strategic point of view, the tools to analyze the general environment and the industry and a model for strategic management.
- Module contents:
 - Different business strategy options and the search for a competitive advantage.
 - The Industry and the Company Value Chains.
 - Key Success Factors.
 - Mechanisms for growth.
 - Science/technology and strategy interrelationship.

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[Prof. Dr. Xavier Ferràs](#)

Project Workshop

- A Project Workshop will be put into practice throughout the programme so that participants will implement their learnings and will apply them to their own case studies and projects with an eminently **practical approach**.
- **Layout of the Workshop:**
 - Participants will work in teams of approximately 5 people, thus developing communication and collaboration skills between peer scientists/technologists
 - During the Workshop teams will:
 - work on the business opportunity: Market size, competitive analysis, and time (technology adoption Life Cycle)
 - design a business model (BMC) for the opportunity
 - identify the most important unknowns/hypotheses on the BM and work on a validation strategy
 - estimate the time and the amount of money they would need to get to the next step (first validation round)
 - pitch their projects to receive feedback from the other participants peers and professors
 - Teams will pitch their projects to all the participants, professors, and representatives of the Centers to obtain feed-back

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[Prof. Dr. M. José de la Maza Peiro](#)



[Prof. Dr. Lluís Pareras](#)

Entrepreneurial finance

- This module will be dedicated to one of the most challenging and difficult activities that an entrepreneur must embark upon: understanding the financial needs of the venture.
- Module contents:
 - Understanding the financial statements: profit and loss account, cash flow and balance sheet.
 - Methods to estimate the capital requirements of the venture.
 - Preparation of the Financial Plan.
 - Financial resources for an innovative new venture: business angels and venture capital.

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[Prof. Dr. Gloria Batllori](#)

Cases

- Throughout the programme, technology and science-related businesses and start-ups will be discussed.
- ESADE will work with science-based entrepreneurs in order to explore the possibility to incorporate parts of their experiences into the course. This will allow the students to see examples of entrepreneurship specifically related to science.



3. Faculty



Prof. María José de la Maza

Program director



Associate Professor of Management and Entrepreneurship at Esade. She is also an advisor, investor and an executive committed to value creation and team building. She holds a degree in Industrial Engineering by Universitat Politècnica de Catalunya (UPC) and an Executiva MBA by Esade. Her areas of interest are entrepreneurship, management, business strategy and project management and leadership. She has more than 20 years of professional experience working with multidisciplinary teams in several sectors.

Academic Director of the ESADE courses for the KIC InnoEnergy since March 2024, running *From Science to Business* and other science and technological related courses and activities.

Prof. Dr. Jordi Vinaixa

Associate Professor, Department of Strategy and General management. PhD in Chemistry (University of Barcelona) and MBA (ESADE).



His main subjects of interest are Innovation and Technology based Entrepreneurship.

He did research in chemistry at the Universities of Barcelona and of Sussex, and has previous professional experience as a manager in the chemical, education, cultural and service industries.

Academic Director of the ESADE courses for the KIC InnoEnergy.
Running *From Science to Business* and other science and technological related courses and activities since 2005.

Prof. Dr. Xavier Ferràs

PhD in Economics and Business from UB and MBA from ESADE and Telecommunications Engineer from UPC.



Associate Dean, ESADE ExecMBA Programs

Former Dean of the Faculty of Business and Communication at the University of Vic.

Until 2012, he was Director of the ACC10 Centre for Business Innovation (Catalan Agency for Competitiveness), and was responsible for technology transfer policies, R&D and development of clusters in Catalonia.

Prof. Dr. Gloria Batllori



Associate professor of finance at ESADE Business School.

She has been linked to the world of strategic consulting and, subsequently, also to that of financial advice, basically in the investment area. Her main clients and projects include the following: investment strategy for a state investment body, development of private banking for one of the main Spanish banks, internationalization of the Spanish savings banks, disinvestment of an important holding company in Spain, various projects for a leading company from the frozen pastries and bread industry, and other collaborations in medium-sized Spanish companies. She is a CFA and has been an ESADE Lecturer since 2000.

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4. About ESADE



About ESADE



- Esade has delivered the course *From Science to Business* to BIST staff since 2008, initially collaborating with ICFO and from 2016 with the Barcelona Institute of Science and Technology.
- Since 2010 Esade also delivers the course for the KIC InnoEnergy in collaboration with the European Institute of Innovation & Technology (EIT) - International teams of MSc and PhD students - 15 editions - More than 375 participants from 20 nationalities.

About ESADE

International PRESTIGE

Esade is one of the top-10 business schools in Europe according to the main international rankings.

RECOGNIZED by Companies

Esade the 1st (most highly valued) international business school by companies.

INNOVATIVE with Regards to Learning

Esade's learning model, based on the development of managerial skills and competencies, is a pioneer in Europe.

COMMITTED to Society

Esade is the second most highly ranked business school in the world for the corporate social approach and ethics of its MBA . Its Institute for Social Innovation is the cornerstone of our social commitment.

Creates LINKS with People

Esade is the business school with the second largest alumni association in Europe (with more than 40,000 alumni).

HIGH QUALITY, Relevant Learning

Esade's commitment is to provide high quality, relevant learning for companies that translates into results.

Top-Nontech FACULTY with Business Experience

Esade has a widely recognized faculty, that on top of developing high-quality research, has also relevant business experience.

About ESADE

- Esade and CERN are collaborating in ATTRACT (<http://www.attract-eu.org/>), a new, open, pan-EU initiative to accelerate the development of detector and imaging technologies for market – through a process of co-innovation with other labs, SMEs, industry and universities.

The aim: to work with scientists, students, entrepreneurs and investors to invent new services and products, and attract new investment to the sector.

A project is already in going on at CERN's Geneva campus, in collaboration with Esade and Aalto.

- Esade and CERN are also developing the [Thinking the Unknown programme](#), for executive profiles.



[Financial Times Article on Esade's educational activities with CERN](#)

5. About BIST



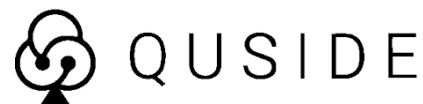
The Barcelona Institute of Science and Technology

BIST is a leading institution of multidisciplinary research encompassing seven Catalan research centres of excellence. By fostering collaboration among members of its diverse scientific community, BIST aims to play a leading role in pushing the frontiers of science while becoming a global reference for training outstanding research talent.



From Research to Market: Transforming basic science into 50 spinoffs

- 52 startups created, 41 active
- Health / Energy and Sustainability / Computing and Communications
- These spin-offs have raised over 200 M€ in funding



6. Contact People



BIST contact people for the programme



Elena Redondo, PhD
Talent Programme Manager
eredondo@bist.eu

If you are from a BIST centre, please contact your KTT representative before registering.

If you are from an external institution, please send us an email to talent@bist.eu before registering.

You can register in the [BIST Mosaic Platform](#)

Thanks



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