

POLITECNICO
MILANO 1863

Double Degree in Management and Design

Management Engineering and Product-Service System Design

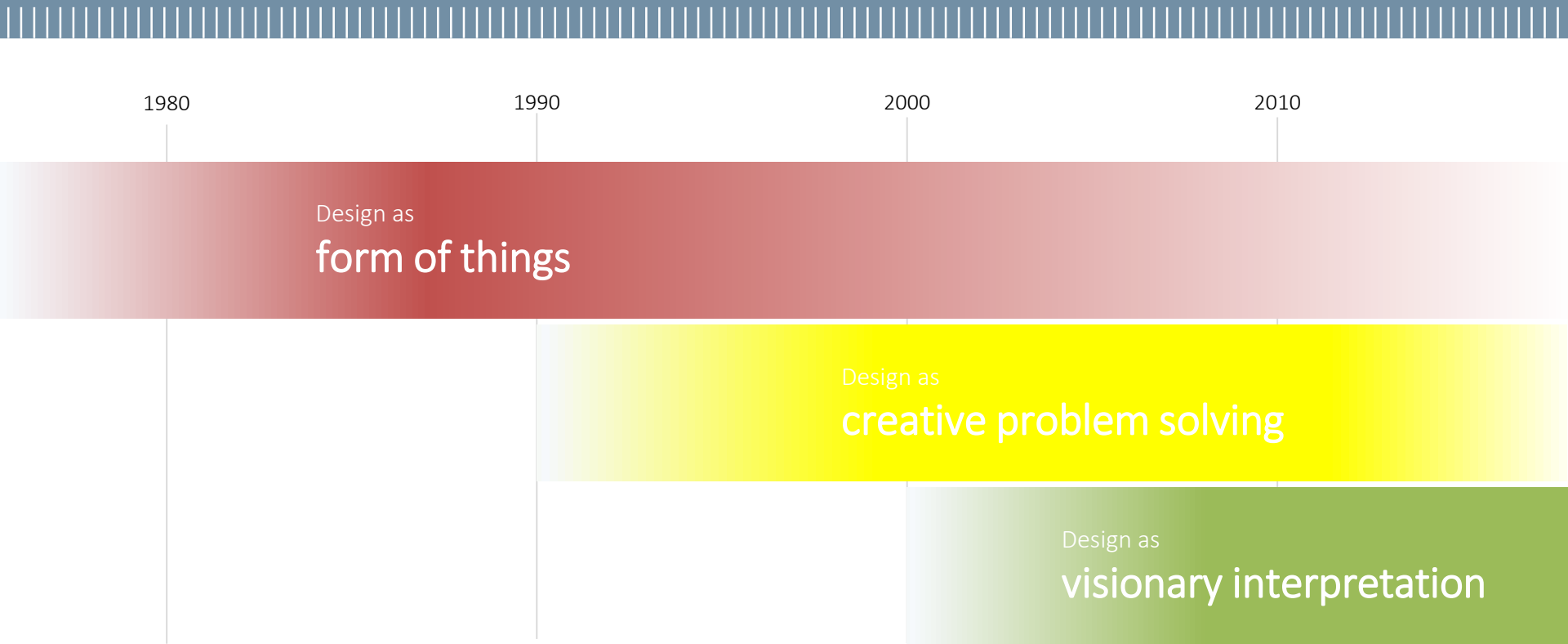
Claudio Dell'Era (claudio.dellera@polimi.it) and Silvia Magnanini

21st November 2018

Design Management field



History of the «Design Management» field



Analyzing the «Design Management» field: 1980s and 1990s ...



1980

1990

2000

2010

Design as
form of things

New
Opportunities



Developing

New
Products



Manager



Designer



Analyzing the «Design Management» field: 1990s and 2000s ...

1980

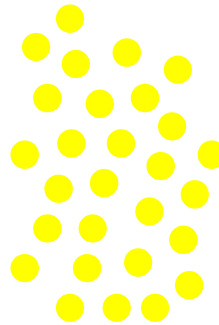
1990

2000

2010

Design as
creative problem solving

Ideating



New
Opportunities



Developing

New
Products



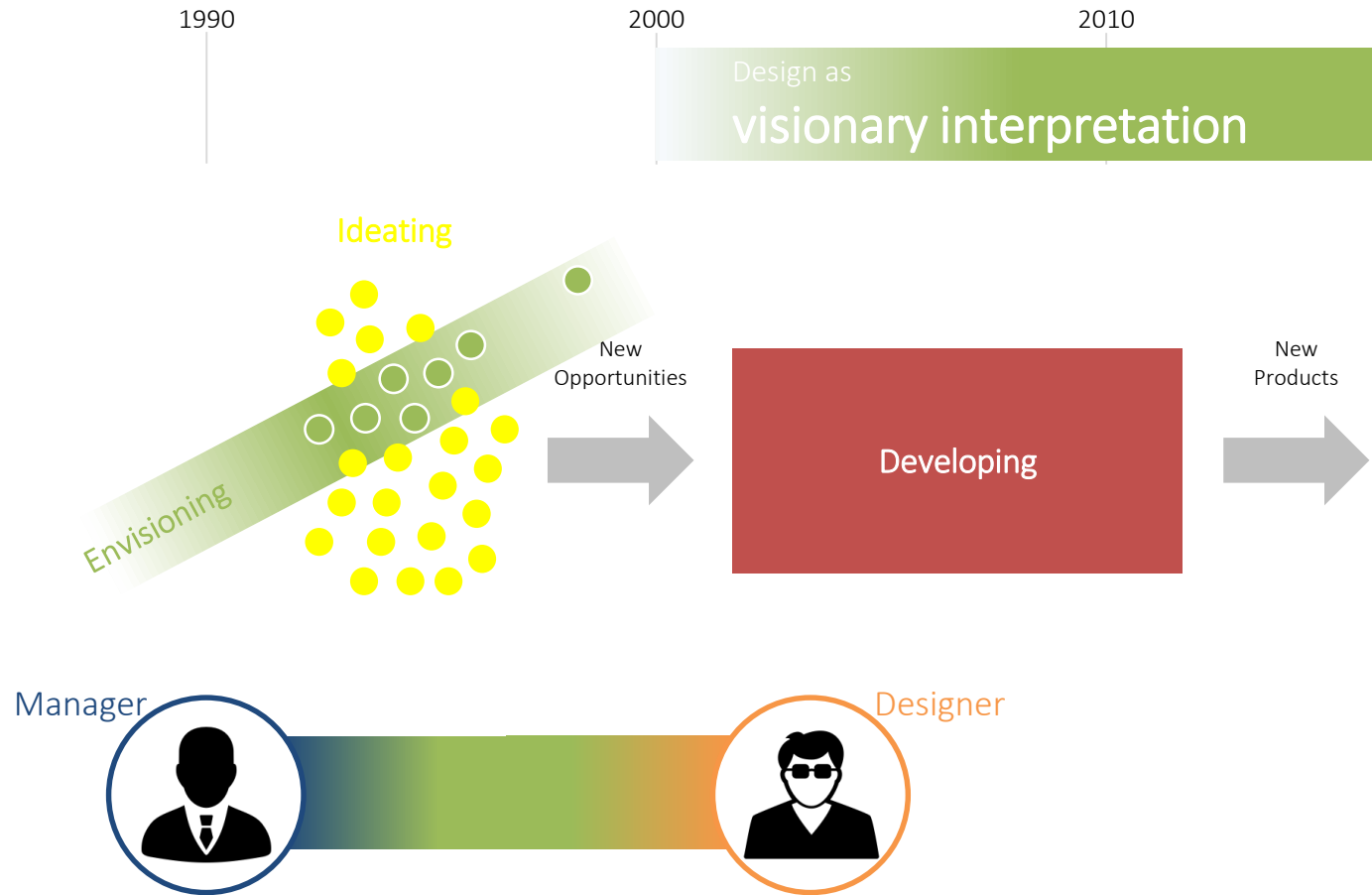
Manager



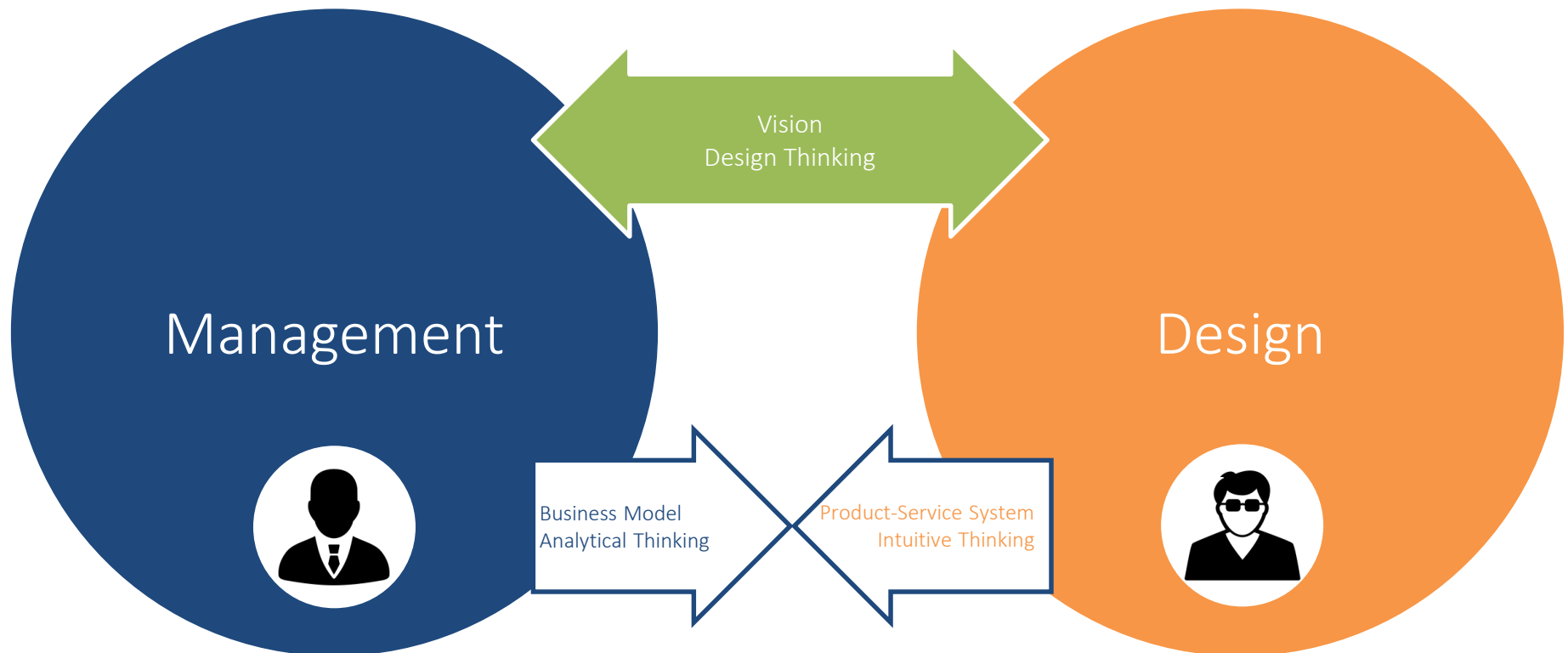
Designer



Analyzing the «Design Management» field: 2000s and 2010s ...



Management and Design





*“We live in a **world awash with ideas**. Thanks to open innovation, crowdsourcing, and especially to digital technologies, we have easy access to an unprecedented amount of novel opportunities.*

*How to make sense of this overabundance of opportunities? How to **envision the next big thing**? How to avoid trying everything and fall into the paradox of ideas (the more ideas we create the less we innovate)?*

*To succeed in an overcrowded world **we need a meaningful direction**. To focus our creativity and the creativity of others towards a new, shared purpose.”*

Roberto Verganti – Politecnico di Milano

Design Thinking



*“Design thinking is a **human-centered approach** to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success.”*

Tim Brown – IDEO

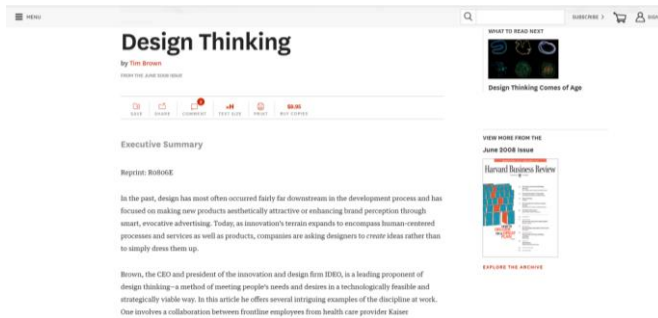
*“The way I think about design thinking is it is in a halfway house between **analytical thinking**, for the purely deductive and inductive logical thinking that utilizes quantitative methodologies to come to conclusions, and **intuitive thinking**, knowing without reasoning. And design thinking is the kind of thinking that takes the best of both sides. So what it takes is invention of the future from the intuitive thinking and the willingness to use what I call abductive logic – inference of the best explanation. As well as some aspects of the power of inductive and deductive logic from analytical thinking to produce something that is creative but replicable”*



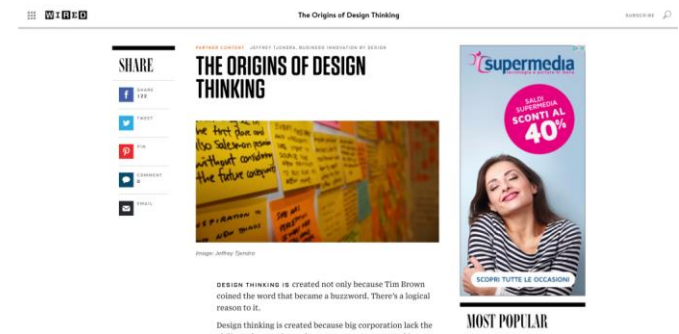
Roger Martin – Rotman School of Management at the University of Toronto

The «explosion» of Design Thinking: Press

Harvard Business Review



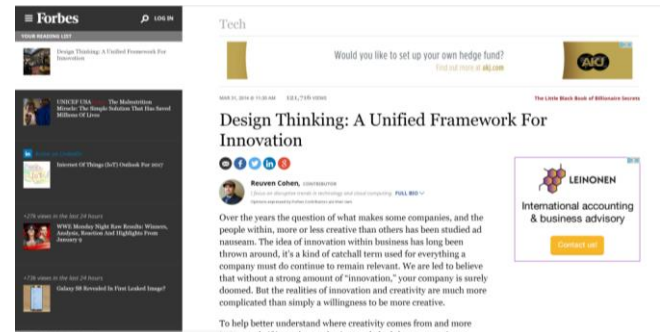
Wired



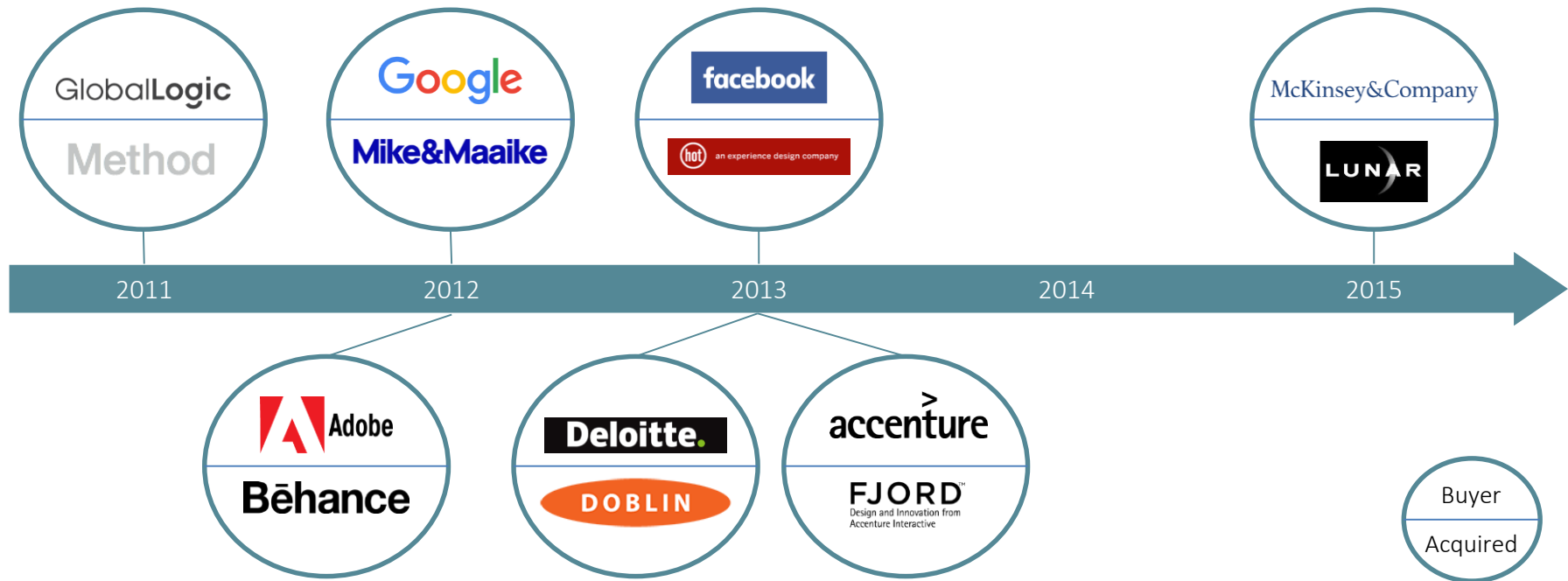
Fast Company



Forbes



The «explosion» of Design Thinking: Acquisitions



The «explosion» of Design Thinking: Diffusing adoption (in Italy)

SUPPLIERS



Design Studios



Strategic Consultants



Digital Agencies



Technology Developers



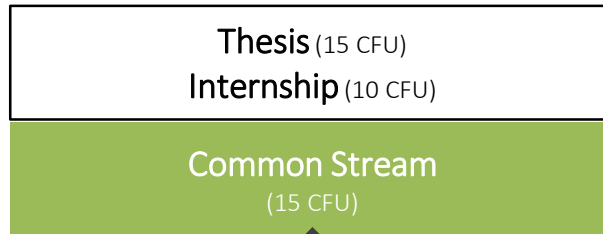
INNOVATORS



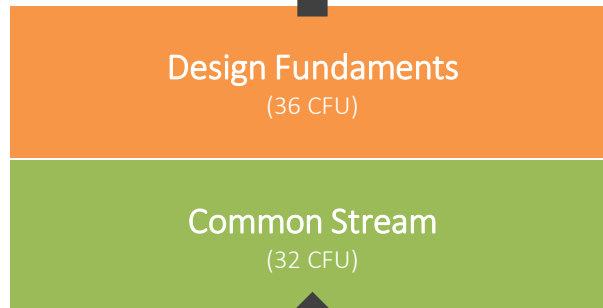
X-shape design

Intake Management Engineering (180 CFU)

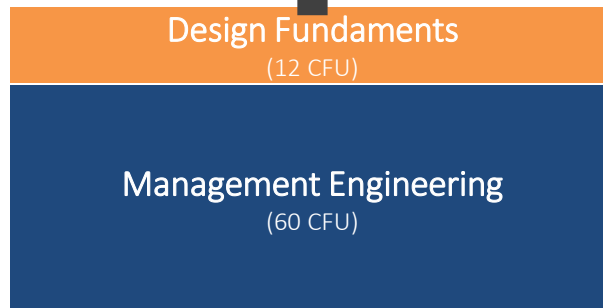
2,5 Years



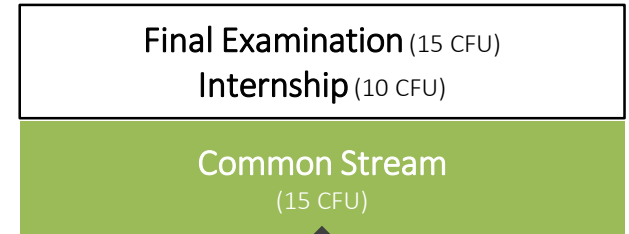
2 Years



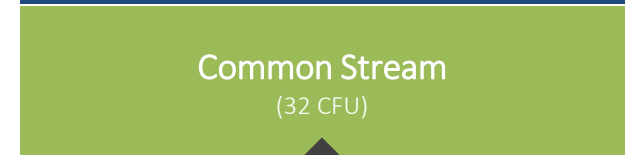
1 Year



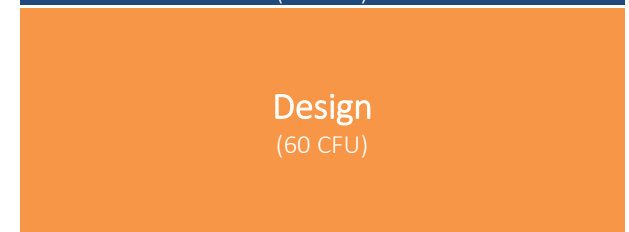
Intake Design (180 CFU)



Management Engineering Fundamentals
(35 CFU)



Management Engineering Fundamentals
(11 CFU)



Intake Management Engineering

Intake Management Engineering (180 CFU)

2,5 Years

Thesis (15 CFU)
Internship (10 CFU)

Common Stream
(15 CFU)

Design Management Lab (15 CFU)

2 Years

Design Fundamentals
(36 CFU)

Design Methods (6 CFU)
History of Design (6 CFU)
Design Seminar (6 CFU)
Product-Service System Design Studio – Service Design (12 CFU)
User and Social Innovation (6 CFU) OR **System Design for Sustainability** (6 CFU)

Common Stream
(32 CFU)

Design Strategy and Economics of Innovation (10 CFU)
Management of Design and Innovation Projects (5 CFU)
Branding and Communication (6 CFU)
Professional Workshop (6 CFU)
Digital Business Innovation (5 CFU)

1 Year

Design Fundamentals
(12 CFU)

Visualization and Prototyping (6 CFU)
Service Design and Innovation (6 CFU)

Management Engineering
(60 CFU)

Leadership and Innovation (10 CFU)
Strategy and Marketing (10 CFU)
Logistics Management (10 CFU)
Operations Management (10 CFU)
Accounting, Finance and Control (10 CFU)
Business and Industrial Economics (10 CFU)

Alumni from the second edition

Silvia Magnanini

Bachelor in
Product Design

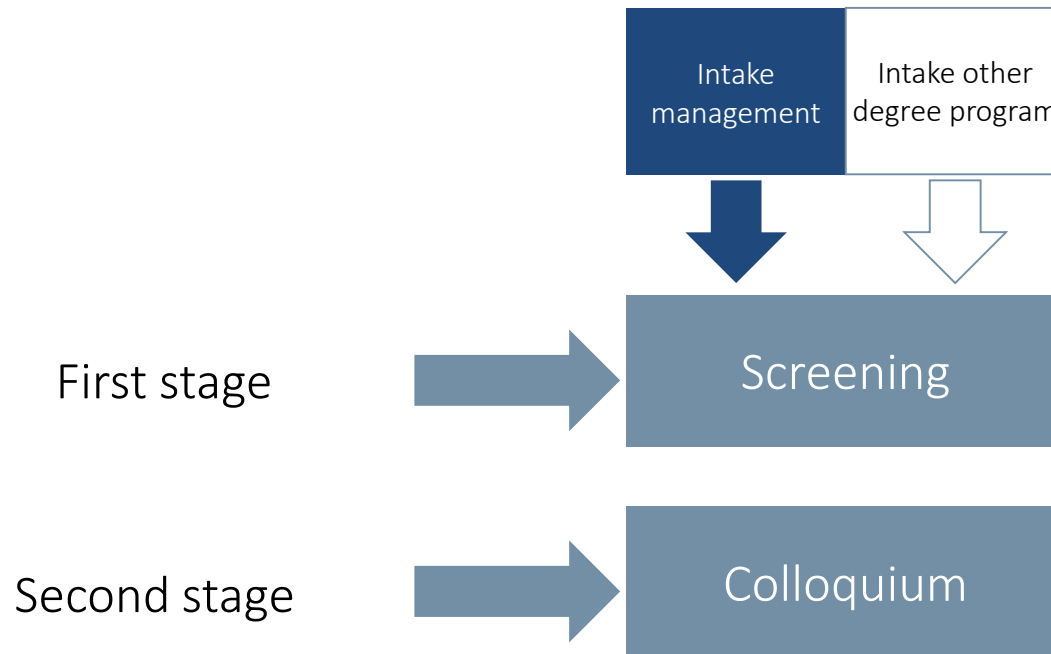
1st Edition



I always wanted to understand how to merge creativity and exploration with feasibility and execution. I really think that the power of innovation lies in the synergic work between these two dimensions. Therefore the Double Degree program seemed to me the best opportunity to strengthen both dimensions.

Internal Double Degree: Selection process

- Evaluation based on a two stage process: **Screening** and **Colloquium**
- Only students that pass the Screening stage will access to the Colloquium



Internal Double Degree: Selection Process – Screening

Screening, based on:

- A **motivation letter**, explaining why the candidate is willing to attend the Double Degree Program and how she/he may contribute to the community of the Program
- **Final mark in the Bachelor Degree**
- **Curriculum Studiorum** in the Bachelor Degree (self-declaration of transcripts with mark and finale degree grade and abstract of the thesis (not more than 5 standard word pages) and a self declaration of transcripts of the first semester of the MSc study course
- **Curriculum Vitae** indicating other competencies developed (beside the Curriculum Studiorum) and how they were developed. Competencies may include: core competencies in the field (e.g. project portfolios), competencies developed in the second degree field (e.g. working experiences), tools and methodological experiences, hobbies etc.

Internal Double Degree: Selection Process – Colloquium

Joint Colloquium, aimed to evaluate:

- The **coherence of the expectations** and the **motivations** of the candidate with the objective of the double degree program
- The **coherence of the specific competencies** acquired by the candidate in the bachelor level and through extra-curricular experiences with the objective of the double degree program
- The candidate's **attitude towards the disciplines** of the double degree program (which could be assessed through interview questions or a case study)

How to submit

- The application procedure is available at the following link:
 - <http://www.ingindinf.polimi.it/en/didactics/internal-double-degree-projects/>
- The application should be sent (only from the institutional e-mail XXXXXX@mail.polimi.it) by e-mail to: management-engineering@polimi.it
- The e-mail subject should be: Application for internal double degree in Management Engineering + Product-Service System Design (Please specify the double degree you are applying to)
- The following information should be provided in the attached documents:
 - Motivation letter
 - Final mark in the Bachelor Degree
 - Curriculum Studiorum in the Bachelor Degree (including exams transcripts and abstract of the thesis)
 - Curriculum Vitae with clear indication of other competencies developed (beside the curriculum studiorum) and how they were developed, professional experiences, and hobbies