

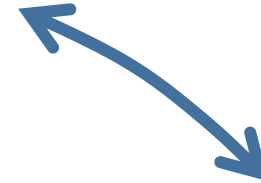
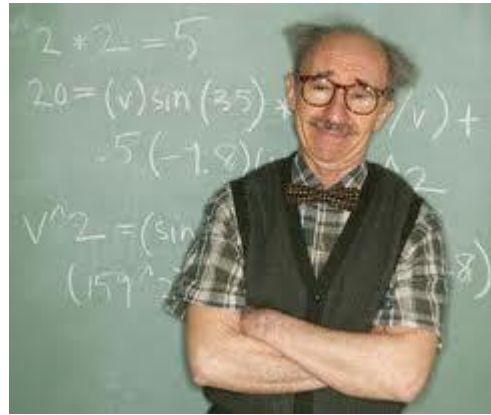
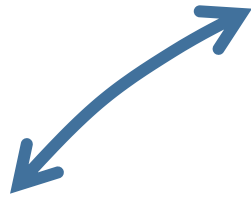
Master Degree in

 DATA SCIENCE

University of Milano-Bicocca

**Early Bird Initiative:
companies engagement**

Collaboration in Labs and Internships



Opportunities of collaboration for companies

- First year and second year labs - 6 CFU each
- Internship - 6 CFU
- Final thesis - 24 CFU

Collaboration in Labs

Data Science Lab at the end of the first year

- Agreement with the teacher upon case studies and lab activities on domains and processes of interest of the company

Industry Lab

- Agreement with the teacher upon teaching parts of the course
 - 1. description of the application domain/business process +
 - 2. statistical and computer science techniques and technologies to be applied +
 - 3. modeling of the problem +
 - 4. analyses and experiments.

Other second year Labs

- In case of full matching between the lab topics and the company domains of interest, agreement with the teacher upon case studies and lab activities on domains and processes of interest of the company.

Collaboration in the internship and thesis

- Internship - 6 CFU
 - Case studies focused on specific company business processes.

- Thesis - 24 CFU
 - Case studies focused on specific company business processes, applying methods, techniques, technologies that are innovative compared to those ones currently applied.

Main application areas

- Customer and product profitability
- Unified view of customers across different organizational units
- Customer acquisition and retention strategies
- Customer satisfaction strategies
- Customer segmentation
- Market segmentation
- Operations and performance management
- Production chain optimization
- Supply chain and delivery channel strategy optimization

Main research areas of Data Science groups in Bicocca that match with most significant company sectors in Lombardy region

Industrial/service sector

- Finance
- ICT
- Media
- Food
- Energy
- Health
- Telecommunications
- Tourism

Production chains

- Agrofood
- Life Sciences
- Tourism

Resources for stage and final Thesis

- Effort requested to students for the stage: 150 hours
- Effort for the company (10%) – 15 hours
- Effort requested to students for the final thesis: 600 hours
- Effort for the company (5-6 %) – 30-35 hours

Timing

Year	Type of activity	Description	Activities placement in the year	Timing for companies engagement
First	Lab course	See previous slides	march june 2018	December 2017
Second	Industry Lab and other labs	See previous slides	September 2018 for student candidacies January - July 2018 for activities	Focus group with companies June 2018
	Stage	See previous slides		
	Thesis	See previous slides		

Just to start effectively

In charge of the company a short report on the following issues:

- Main available datasets
 - Description, size, rate, type of data (e.g. images, flat files, etc.).
- New types of datasets to be achieved (e.g. from Twitter, from the Internet of things, etc.)
- Description of the business process of interest of the company
- Type of model (interpretative, predictive, prescriptive) and outcome of the analysis
- Previous studies