



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Data-Driven Organizations and Management

2324-2-F9102Q005

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#### Learning objectives

The course aims to build a practical understanding of digitalisation and the digital transformation of organisations. In particular, the course will focus on the data science process and required resources, agile methods for developing data-driven business solutions, strategic, organisational, and competitive approaches to analytics and strategies for data-driven value creation and data-driven sustainability management creation in the context of various industries.

#### Contents

Big data and artificial intelligence are key drivers for the digital transformation of organisations and today's societies. Thus, the first module introduces the perspective on digitalisation and business transformation throughout the program – how to create value with big data and artificial intelligence. We investigate value creation approaches of “analytical leaders” and will elaborate on how organisations can create and maintain competitive advantages with big data and artificial intelligence. In so doing, we will not only present proven and successful big data and artificial intelligence applications from the industries and business functions of the participants but also teach how to create data-driven innovations that create actual customer value using agile innovation approaches.

After the module, participants:

- have understood how big data and artificial intelligence shape the digital transformation of organisations.
- Can analyse and evaluate the implications of this transformation for their industry/organisation.
- Can develop strategies for data-driven value creation and impact evaluation and are familiar with proven use cases for their domain.
- Know which organisational and technical resources are required for competing on analytics.

## **Detailed program**

Strategies, business Problem Formulation and Data Collection  
Business Models, Data management and sustainability  
Exploratory Data Analysis  
Data-driven sustainability management (intentionality, measurability, additionality)  
Data Governance, Ethics, and Privacy  
Building and Managing a Data-Driven Team

## **Prerequisites**

Fairly good skills in learning, writing and speaking, and a general knowledge of economic processes. Elements of management.

## **Teaching methods**

Lectures, case discussions, guest speakers and simulations (Data Driven impact evaluation and ESG intelligence)

## **Assessment methods**

In class simulations, written exam (short essays) and in-class participation.

## **Textbooks and Reading Materials**

Reading package made available on Moodle platform.

## **Semester**

First Semester

## **Teaching language**

English

## **Sustainable Development Goals**

QUALITY EDUCATION | DECENT WORK AND ECONOMIC GROWTH | INDUSTRY, INNOVATION AND INFRASTRUCTURE | SUSTAINABLE CITIES AND COMMUNITIES | RESPONSIBLE CONSUMPTION AND PRODUCTION

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