

# COURSE DETAIL

## BIG DATA AND DATABASES

**Country**

Italy

**Host Institution**

University of Commerce Luigi Bocconi

**Program(s)**

Bocconi University

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Statistics Computer Science Business Administration

**UCEAP Course Number**

105

**UCEAP Course Suffix****UCEAP Official Title**

BIG DATA AND DATABASES

**UCEAP Transcript Title**

BIG DATA&DATABASES

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## Course Description

This course provides an overview of data management architectures and analytics procedures aimed at organizing, describing, and modeling big data, both structured and unstructured. The course discusses both technical aspects of data management/analytics and topics related to analysis managerial evaluation including how to translate the outputs into meaningful business insights. The course examines topics including relational databases such as OLTP, Data warehouse, and SQL language; big data and NoSQL databases, distributed file system, Hadoop, Spark, and Data Lake concept; data understanding and data preparation; models and statistical techniques applied to Big Data; regression and classification trees; ensemble methods (random forest and boosted trees); logistic regression; supervised artificial neural networks; models' performance evaluation; big data ingestion and management; data preparation and cleaning; machine learning algorithms application; and machine learning model evaluation. The course requires students have a basic understanding of descriptive and inferential statistics and basic computer skills as a prerequisite.

## Language(s) of Instruction

English

## Host Institution Course Number

30416

## Host Institution Course Title

BIG DATA AND DATABASES

## Host Institution Course Details

[https://didattica.unibocconi.eu/ts/tsn\\_anteprema.php?cod\\_ins=30416&anno=2026&or...](https://didattica.unibocconi.eu/ts/tsn_anteprema.php?cod_ins=30416&anno=2026&or...)

## Host Institution Campus

University of Commerce Luigi Bocconi

## Host Institution Faculty

**Host Institution Degree**

**Host Institution Department**

Decision Sciences

**Course Last Reviewed**

2025-2026

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