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_anteprima.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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