International degree programmes
Online open days 28-30 November 2023

ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

MEET **YOUR FUTURE** AT THE UNIVERSITY OF BOLOGNA

BUSINESS ANALYTICS curriculum

2 Years Master's Degree in STATISTICS, ECONOMICS AND BUSINESS

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Two Year Second Cycle Degree Programme in Business Analytics

- Is a curriculum of the Laurea Magistrale in Statistics, Economics and Business
- Has been operating for three years
- Today's presentation:
  - **Why a Master's Degree in Business Analytics?**
    - Overview
    - Career opportunities
  - **Course structure – learning activities**
  - **Admission to the programme**

Why Business Analytics?

- The digital transfomation of our society is changing the way businesses work

- The Business Analyst supports business decisions through data analysis:
    - identifying critical areas and opportunities for improvement
    - proposing plans to improve the company's performance

- Examples: statistical consultancy, online and retail sales, Customer Relationship Management, production and distribution, software applications

- The role of the Business Analyst is relatively new:
    - the types of data the company can use are new
    - many of the statistical methods that the company can use are also new

Career Opportunities

Business Analysts are in high demand in the job market, working within areas such as:

- industrial and service companies / public and private sectors

- consulting firms

- research centres

- software companies

For whom is the two year Master's Degree in Business Analytics designed?

Students who are already qualified at first-degree level in the appropriate subjects and who have:

- a keen interest in working with data

- an inclination for statistical and computational disciplines

Course Structure: Learning Activities in the 1st Year

First Year

1. Mandatory courses

		CFU (?)
96793	INFORMATION SYSTEMS AND DATABASE MANAGEMENT	6
96800	STATISTICAL SOFTWARE FOR BUSINESS (LABORATORY)	6
96798	BUSINESS SURVEYS DESIGN AND PLANNING	6
96801	LANGUAGE LABORATORY: COMMUNICATION OF STATISTICS AND DATA BUSINESS ANALYTICS	6
96795	OPTIMIZATION METHODS FOR BUSINESS ANALYTICS	6
96794	STATISTICAL INFERENCE AND MODELLING	10
96796	BUSINESS STATISTICS: METHOD AND APPLICATIONS	10
96799	FORECASTING AND PREDICTIVE ANALYTICS	10

2. Electives (Internship advance) (max limit 12 CFU)

		CFU (?)
96811	INTERNSHIP	12

Course Structure: Learning Activities in the 2nd Year

Second Year

1. Mandatory courses

		CFU ?
96803	WEB AND SOCIAL MINING	6
96805	MICRO-MARKETING AND CRM	6
96804	BIG DATA AND ANALYTICS	10
96802	DATA MINING FOR BUSINESS AND MARKET RESEARCH	10

2. 12 CFU to be chosen among: (max limit 36 CFU)

A) ELECTIVE COURSES SUGGESTED BY THE PROGRAMME (MAX LIMIT 36 CFU)

		CFU ?
96811	INTERNSHIP	12
96806	DISCRETE CHOICE MODELS	6
79299	Design of Experiments	6
B0413	DEEP LEARNING APPLICATIONS IN BUSINESS ANALYTICS	6

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Admission to the Programme

Admission process and selection

- **Three intakes**: the first two are open to everyone; the last is open to EU and EU-assimilated candidates only (because it occurs late in the admissions year)

Academic admission requirements

- **University-level knowledge** in the following subjects is **required and deemed essential**:

    - **Mathematics** (fundamentals of mathematical analysis, matrix algebra)

    - **Probability theory** (axioms and fundamental theorems of probability theory)

    - **Statistics** (fundamentals of descriptive statistics, fundamentals of statistical inference, linear model, data matrices and derivative matrices, basic concepts of sampling techniques, multivariate statistics)

    - **Economics** (fundamentals of microeconomics) OR **Business economics and management** (fundamentals of business management, fundamentals of marketing)

- For full details: please read in section 1.1 of the 2023—24 Admissions Notice, available here: https://corsi.unibo.it/2cycle/BusinessAnalytics/how-to-enrol

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Admission to the Programme

How do we evaluate applications?

- A candidate's educational and personal preparedness is assessed by an Admissions Board
- The Board evaluates a candidate's CV and documentation concerning university studies, as follows:
  - **Academic career**: previous studies completed, including the final grade, and grades obtained in individual courses
  - **Coherence** of the academic career with the educational objectives of the master's degree program
- In cases where it is deemed necessary, the Board may, at its discretion, ask candidates to attend an interview

English language admission requirements

- Possession of appropriate English language skills to (at least) level B2

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Job placement rate and further information

Job placement rate

- The course has not been active for long enough to provide reliable graduation statistics, but we expect to have a high job placement rate, in line with the other two courses that are part of CLAMSEI

Further information

- For further information, please refer to the Business Analytics web page:

    https://corsi.unibo.it/magistrale/BusinessAnalytics

- For queries, please contact the Business Analytics Programme tutor:
    didatticasociale.clamsei-ba@unibo.it
    Or the Business Analytics Programme Coordinator:
    didatticasociale.clamsei@unibo.it

Thank you for your attention

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