

**Direction**

Jorge Manuel Pereira Duque

**Number of Semesters**

**ECTS**

34

## About

The Postgraduate Program in Business Analytics and Data Science, developed by ISLA Business Academy in collaboration with Metyis, aims to provide structured training in data science. It offers a clear synergy between theory and practice, enabling participants to develop Analytics and Data Science projects.

The exponential growth of digital technology has provided us with an immense generation of data. Public and private sector organizations have access to vast amounts of data collected from users, customers, suppliers, and even objects through transactions, social networks, and the Internet of Things, among other sources. They become more efficient and competitive when they can extract information from this data to improve processes and make decisions.

In an increasingly competitive and digital world, companies and organizations need professionals who understand data, know how to analyze it, explore its potential, and convert it into insights to anticipate and respond quickly to the needs of the market, customers, and other stakeholders.

Data analysts, data scientists, and data engineers are just some of the possibilities in the field of data science, which is increasingly in demand in the global job market. This isn't only due to the exponential growth of data but also because it's a transversal field applicable across various sectors, such as banking, healthcare, industry, retail, and the public sector.

The Postgraduate Program in Business Analytics and Data Science aims to equip its students with key knowledge for developing models and applying methods and tools in analytics and data science, with a practical application of data analysis techniques and machine learning algorithms.

With a focus on the business context, this program aims to prepare professionals to create value in any organization through these domains.

## Course Plan

Course Structure1º Ano / Common CoreAlgorithms and Programming in Python 2 ECTS | Big Data Analytics 2 ECTS | Business Data Analysis and Visualization Models 2 ECTS | Data Governance and Cybersecurity 2 ECTS | Data Organization and Architectures 2 ECTS | Database Technologies 3 ECTS | Fundamentals of Business Intelligence and Data Analysis 2 ECTS | Introduction to Data Science in Organizations 2 ECTS | Introduction to Machine Learning in R 4 ECTS | Machine Learning in Python 4 ECTS | Project I 2 ECTS | Project II 2 ECTS | Quality Management and Exploratory Data Analysis 2 ECTS | Statistics 3 ECTS |