ENAE
International Business School



Master in

Business Intelligence and Analytics for

**Business Administration** 

Official Degree from University of Murcia





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## >>> ABOUT US

Center affiliated with:

















## **ENAE**

International Business School of **Business University Foundation of** the Region of Murcia.

### **Empowering**

next-gen business leaders

## **Building**

professional development opportunities

#### **International Presence**

in institutions from around the world

## **FORMING LEADERS SINCE**1988

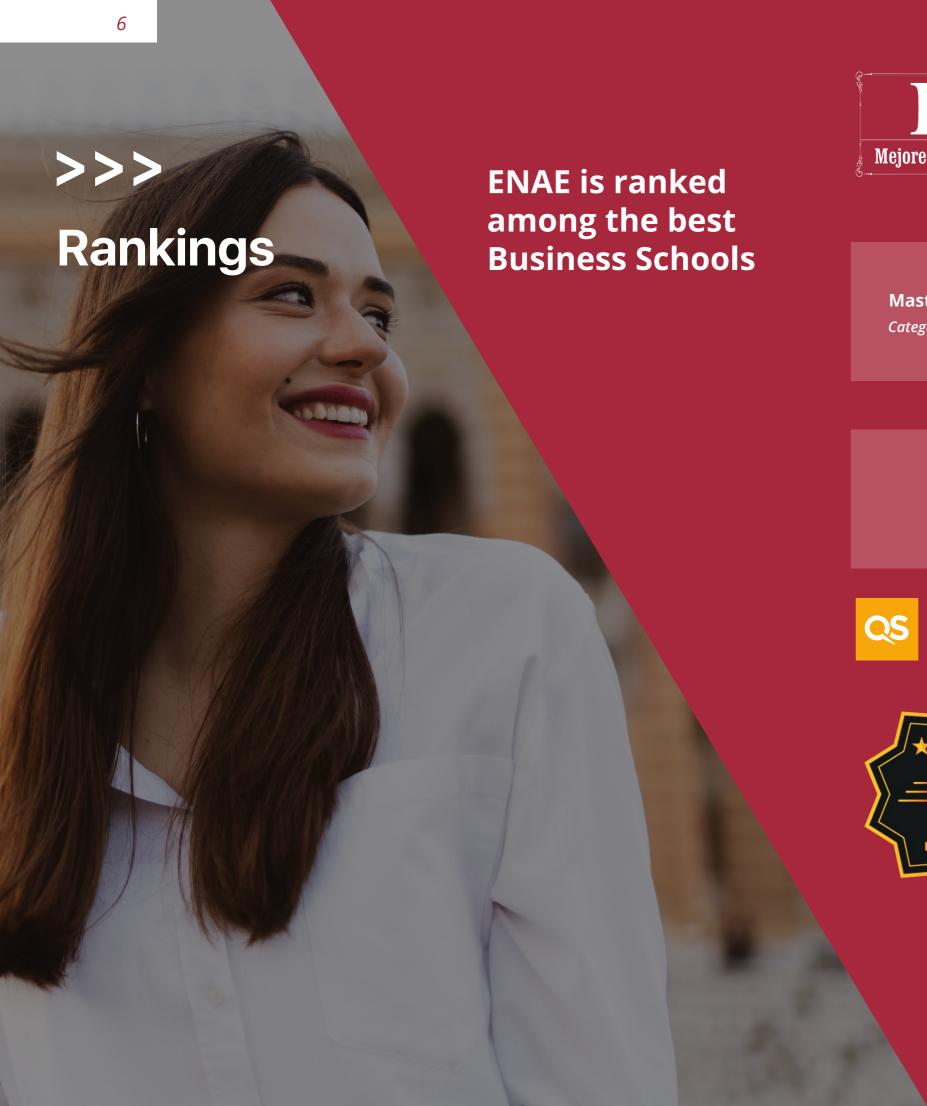
01// Continuous training 04// Professional growth

02// International recognition

*05//* Practical tools

03// Entrepreneurship

06// Networking groups



Forbes

Mejores Escuelas de Negocio 2025

**Ranking 2025** 

#6

**Master in International Trade** 

Category: Recent graduates and young professionals

#7

**Global Executive MBA** 

Category: Executive Programmes

#12

**International MBA** 

Category: MBA

#4

Magistrae

Category: Senior Management

QS STARS











# Introduction to the Master's Degree

Throughout the Master's Degree program, students acquire practical skills in applying new technologies related to the Big Data phenomenon, modern predictive analytics and data visualization tools.

This program offers students a global perspective during this data and information technology-based era, based on five major areas.



Professionals
who wish to boost and
expand their business
intelligence knowledge
and skills



**Data Management** 



**Business Analytics** 



**Big Data** 



**Data Science** 



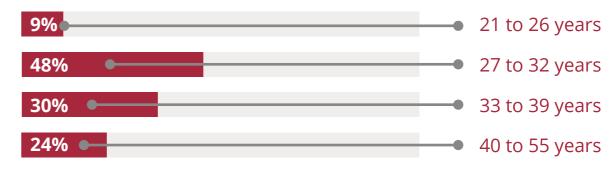
Leadership and Management Skills



## Student profile



Age



**Sex** 



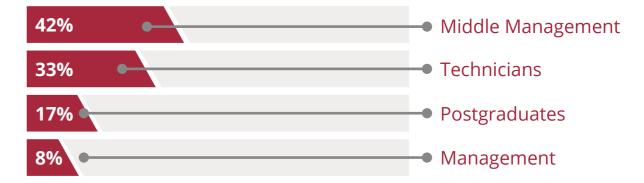
#### Nacionalities

- Spain Italy
- ColombiaHonduras
- Costa Rica Panama

#### Qualifications



#### **Category**



## **Our vision**

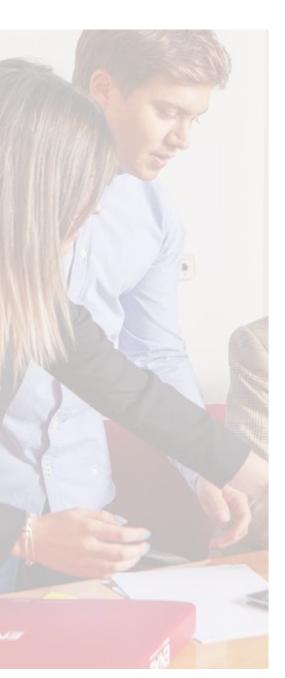
In today's knowledge and information-based society, more companies are demanding professionals with expertise in data analysis. The market is looking for top-level professionals who can add value to the company by streamlining processes and providing agile, efficient, and high-quality solutions.



The Master's Degree program is created to help professionals who want to improve and broaden their business intelligence expertise and abilities to become leaders in key fields, as well as those who desire to shift their career towards the modern and innovative field of data science. You are just starting your journey, and we are here to provide you with the necessary training to chart your course.



# **Objectives of the Master's Degree**



This training program is designed in five distinct areas to empower you to apply new technologies related to the Big Data phenomenon and modern predictive analytics and data visualization tools. This is one of the major challenges when using Artificial Intelligence algorithms.

### 01 //

#### PROCESS IMPROVEMENT

Acquire knowledge on processes and technologies that are designed to enhance and improve company performance, with a particular emphasis on tools such as Business Intelligence (BI). 02 //

## BIG DATA TREATMENT

Get ready for the challenges posed by the Big Data phenomenon, its fundamentals, associated technologies, and the best way for companies to handle Big Data projects.

## > KNOWLEDGE, TECHNOLOGY AND PERFORMANCE

This Master's Degree aims to provide students with the latest technologies and techniques in data science to improve business performance.

#### > BIG DATA CHALLENGES

The program addresses the challenges posed by big data, including data storage, management, and analysis.

#### > TOOLS

The program covers a wide range of tools and technologies used in data science, including programming languages, data visualization, and machine learning.

#### > DATA UNDERSTANDING

The program emphasizes understanding the underlying data and how it can be used to drive business decisions.

## 03 // -

## PREDICTION AS A STRATEGY

Learn to use predictive analytics tools and Data Science.

## 04 // -

## ANALYTICAL AND CRITICAL CAPACITY

Grasp all the possibilities and benefits of data management and analytics for companies.

## Methodology

- > Internship program
- Experience-based learning
  ENAE active methodology
- **Bussines** plan

01 //

**RELATIONSHIP**BETWEEN THEORY
AND PRACTICE

02 //



**CASE STUDIES** 

03 //

VIRTUAL CAMPUS STUDENT POINTS OF VIEW

04 //



NEW TECHNOLOGIES

05 //



MASTER'S THESIS

Learning
Training
Networking
Experience
Real cases
Tutoring assistance





## **Design your Future**

## 360 Learning

Through our new training model, students may select the training modality that best suits their needs: either 100% online or a combination of in-person and online classes, without losing the opportunity to interact with their teachers and classmates in real time.

The essence of in-person training is maintained through a live platform that facilitates online classes. This new training model is complemented by a Virtual Campus in which the student has access to all learning resources, class recordings, as well as additional content such as webinars and online resources.

By combining the best of both worlds, which include in-person training and online training, this model provides students with greater flexibility, custom training, and the development of digital skills.

#### **Choose your modality:**

01 //	Online learning
	Enjoy live online classes as if you were present in the classroom or access class recordings on-the-go.
02 //	Oncampus
	Experience first-hand our self-developed "Learning by doing" method. Face-to-face classes two days a week, usually on weekends, Friday afternoon and Saturday morning
03 //	Blended with stay
	The blended-with-stay learning option merges the best of face- to-face and online training in two stages:
	> Online stage: weekly online classes via our Virtual Campus.
	Onsite stage: a 2-3 week stay in Murcia with intensive face to face classes in the morning and afternoon, as well as networking activities, company visits, and professional conferences.

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#### Master in Business Intelligence and Analytics for Business Administration

#### **BASICS OF DATA SCIENCE AND BIG DATA**

Core concepts, data lifecycle, roles, ethics, architectures, and use cases for generating business value from data.

#### ENTERPRISE DATA WAREHOUSE BASED ON RELATIONAL DATABASE MANAGEMENT SYSTEMS

Dimensional modeling, SQL, ETL/ELT processes, data quality, and governance for building and exploiting enterprise data warehouses.

#### **DATA LAKE AND SQL DATABASES**

Data lake architecture, columnar formats, partitioning, bulk ingestion, querying with SQL engines, and data governance/security.

#### **FUNDAMENTALS OF DATA SCIENCE STATISTICS**

Probability, inference, estimation, hypothesis testing, sampling, regression, and assumption checking for data-driven decision-making.

#### **TOOLS FOR DATA SCIENCE I. R LANGUAGE**

Data wrangling with tidyverse, visualization with ggplot2, statistical modeling, reproducible reporting (RMarkdown), and programming best practices.

#### TOOLS FOR DATA SCIENCE II. PYTHON LANGUAGE

Python ecosystem (pandas, numpy, scikit-learn), notebooks, visualization, APIs, testing, and packaging for productive data science workflows.

#### **TIME SERIES**

Decomposition, stationarity, ARIMA/SARIMA/Prophet, forecasting, evaluation metrics (MAPE, RMSE), seasonality, and calendar effects.

#### DASHBOARDS AND REPORTING

KPI design, data storytelling, Power BI/Tableau, DAX/LOD expressions, performance optimization, governance, and user adoption.

#### **DATA MINING AND MACHINE LEARNING**

Supervised and unsupervised learning, feature engineering, cross-validation, model selection, pipelines, and evaluation metrics.

#### **BIG DATA PARADIGM**

Hadoop, Spark, batch/streaming processing, Lambda/Kappa architectures, microservices, orchestration, and scalable distributed environments.

#### **WORKSHOP: Deep Learning**

Neural networks, CNNs, RNNs, regularization, transfer learning, and model training using TensorFlow/PyTorch on GPUs.

#### **WORKSHOP: Social media sentiment analysis**

API data collection, NLP techniques, embeddings, sentiment classification, temporal visualization, and brand monitoring.

#### **WORKSHOP: Spatial Analytics**

Geospatial data, GIS tools, projections, geocoding, spatial clustering, heatmaps, and accessibility analysis.

#### WORKSHOP: Marketing 360. LOYALTY/ABANDONMENT MODELS

Churn modeling, RFM segmentation, scoring, uplift modeling, and personalized campaign activation strategies.

#### COGNITIVE SERVICES AND MACHINE LEARNING FOR BIG DATA IN THE CLOUD

Managed services (AWS/GCP/Azure), AutoML, MLOps, serverless deployment, scalability, and production monitoring.

#### **WORKSHOP: Recommender systems**

Collaborative filtering, content-based models, hybrid approaches, factorization machines, and evaluation (precision@k, MAP, cold-start handling).

#### **WORKSHOP: People analytics**

Turnover and performance models, talent analytics, fairness, bias mitigation, privacy, and ethical use of HR data.

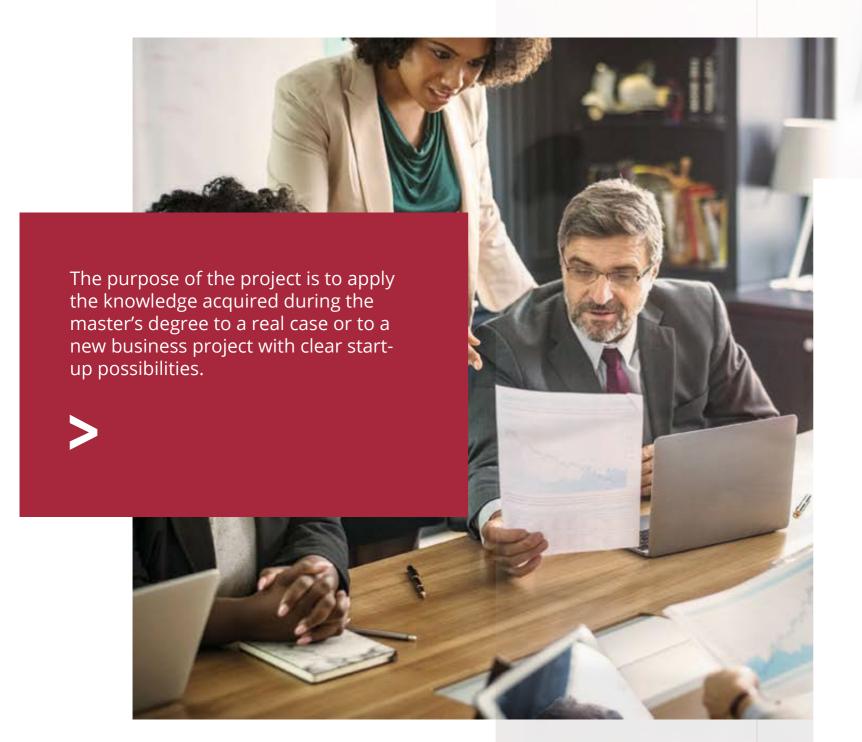
#### **WORKSHOP:** Fintech

Credit scoring, fraud detection, financial time series, explainable models, regulation compliance, and risk modeling with ML.

#### **WORKSHOP: Open Data**

Public data sources, licenses, scraping/APIs, normalization, enrichment, and value creation from reusable open datasets.

## **Master's Thesis**



The objective is to prevent good business ideas that students come up with upon acquiring knowledge during the course, from simply becoming evaluation work, when they can be immediately applied to companies already in operation or even to generate new companies.

Over the course of the project, a tutor will be available to support students as well as advise participants and guide them during the implementation.
Tutors have their specific roles.

Projects will be defended before an examining board, which will evaluate them according to the criteria established for said purpose.

- > Improvements at existing companies.
- > Creation of new lines of business.
- > Implementation in existing companies.

## Company Internships and Employability

ENAE students are supported throughout by our expert careers advisory service.

In addition, students will gain access to our unrivalled professional network, further boosting their career prospects.



# 200+ Agreements



Complete your training in EU companies as part of our internship program.

Students who wish to advance their careers can take advantage of this opportunity by acquiring a highly qualified position within international organizations.

These internships are optional and last from 2 to 9 months.

studied Data Science for Business at ENAE.

In Panama, I work in a position in this area, but a master's degree like this is not offered there.

That is why I decided to come to Spain and live this experience, which has been fantastic.

#### Some of the companies that have relied on **ENAE** to recruit trained professionals:

Cosentino, AMC Grupo, Swiss Time 1925, Lidl, Adecco, Himoinsa, SAbic, Terra fecundis, Mahe gestión de residuos, Cementos La Cruz, Zambú Higiene, Embargos a lo bestia, Istituto de Fomento de la Región de Murcia, Howden Spain, Hero España, Laboratorios Grifols, Bosch España, Nido Robotics, Soltec.















complete their Master's Degree.

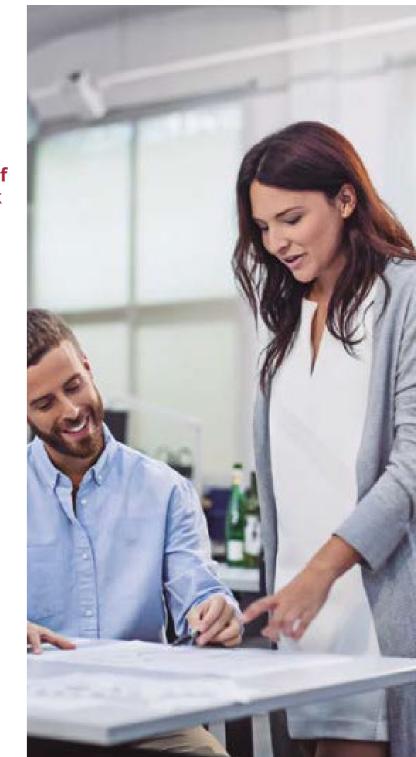
93% of our students start working by the time they

91%

of our students achieve professional progress by the time they complete their Master's Degree.

All of our students will form part of the ENAE Business School job bank upon enrollment and will have access to it whenever they wish, even if they have completed their degree program.





# Testimonials from Former Students

#### HORACIO ANEL MUÑOZ LÓPEZ

Business Intelligence is the present and future. I currently work in this field in Panama, but a master's degree like this is not offered there. That is why I decided to come to Spain and experience this fantastic opportunity.

It has allowed me to learn about another culture, the education system in Spain, and interact with people, which has helped me to grow both personally and professionally. The program itself was very comprehensive, with a particular emphasis on Business Intelligence and Data Mining. It has provided me with the knowledge and skills I need for my work and has enabled me to develop a company through information management.

This profession is one of the most in-demand in any industry as it allows for better decision-making in a company based on information.

#### **CATHERINE WILSON GONZALES**

This year has been one of the best of my life. I chose to pursue a Master's degree in Business Intelligence at ENAE because I wanted to enhance my career and gain the experience of studying abroad. The opportunity to learn about a new culture and the study methods of another country was very appealing to me.

The Master's program is very comprehensive, providing a broad perspective of the business field which, as someone with a more technical background, is incredibly useful. In particular, I found the

creation of the dashboard to be a standout aspect, as it helps to change the culture and way of working of a company, aligning all departments with the overall strategy.

Business Intelligence is a highly sought-after profession in the market, so I would recommend this Master's degree as it is the future, one of the most in-demand professions in any industry today, as it allows for better decision-making in a company based on information.

# **ENAE**

Experience

## > GRADUATION CEREMONY

#### A MOMENT TO REMEMBER

We honour students with their diplomas after a year of dedicated work, perseverance, and gaining knowledge.



#### > NETWORKING

## PROFESSIONALS & BUSINESS PEOPLE

Exchanging ideas, experiences and knowledge

# > SEMINARS AND CONFERENCES

A wide range of topics covered by top-level speakers



# >>> Admission Process

To ensure applicant suitability, all participants must pass an admission process comprising

5 PHASES.

Be motivated to give your best, be eager to learn, have an open-minded attitude, and be ready to forge ahead in an international environment.

05 //
Admission

The Admissions Committee communicates its decision

03 //

**Personal interview** 

As soon as we receive all the documentation, we will contact you to schedule a personal interview



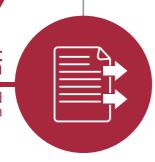
O2 //
Document submission

01 //

Enroll on our website at www.enae.com

**Online pre-enrollment** 

All documentation will be received and reviewed by our academic team



**04** // Decision

The academic committee evaluates the list of applicants and makes a decision



# Admission Process

English language

Degrees related to the fields of Business Administration and Management, Economics, Finance, Marketing and Work Sciences.

Professionals who, even if they have a different degree from the above, can prove professional experience (in positions for which a university degree is required), in the field of business administration and management, economics, finance, marketing and work science. A minimum of 2 years in a professional category of at least "Technician or Middle Management" in positions related to the areas indicated is required.

This master's degree is taught entirely in English, so students must meet one of the following language requirements:

- > Be a native English speaker (must provide a passport as a national of an English-speaking country).
- Have an English level certificate B2 or higher or pass an ENAE level test.
- Proof of official education in English. If a student completed their studies in English, we do not require additional proof of language proficiency.



# Faculty



#### **JOSE ANTONIO RODERO** Director at Impulso Directivo



Currently, he is the Director of associate professor at the Impulso Directivo, a consultancy University of Murcia, and as firm focused on advising execu- a freelance consultant for vatives in various areas, especially rious companies. strategy, business plan development, management control, He has participated as a Balanced Scorecard, marketing, speaker at various national and finance, cost management, hu- international conferences and man resources, etc.

He has worked as Head of the Management Consulting Department at Inforges, as an

is the author of several book chapters.

#### **MIGUEL LÓPEZ** General Director at ENAE



Since October 2018, he has ca at AXA. been the General Director of the Fundación Universidad Em- At both ENAE Business School presa de la Región de Murcia and IE Business School, he teaand ENAE Business School. Pre- ches Operational Finance and viously, he was the Financial Di- Corporate Governance in the rector for Spain and Portugal at Executive MBA program. He is IBM, and in 2006 he was appoin- also an associate professor in ted Financial Director for Gree- the Master's in Insurance Mace, Turkey, and Israel as well. In nagement and in the Senior March 2008, he became CFO of Management Program in colla-Sogeti (CAPGEMINI Group) until boration with ICEA. September 2010, when he was appointed CFO of the IT Region Mediterranean and Latin Ameri-

#### **RICARDO MORENO**

#### Operations Director at Juver



Director of the Master's Pro- His main research and professiness School. For 10 years, he the Supply Chain. has led the logistics and operations management programs at With over 15 years of profes-**ENAE Business School.** 

He is currently also the Direc- worked for Hero España S.A. tor of Master's Final Projects at and is currently the Operations ENAE Business School. In his Director at Juver Alimentación teaching experience, he has de- S.A. livered seminars and been part of the faculty in various MBA programs and in Operations Management in Spain and Latin America.

gram in Production and Logis- sional focus is on Supply and tics Management at ENAE Bu- Storage Management within

> sional experience in Operations Control and Logistics, he has

#### **ELENA MÉNDEZ** Director at enEvolucion



areas such as technology, Hu- Fashion (HR) course. man Resources, and strategy.

She is a professor at IE Business School in the Senior Management Program (SMP), Executive

Director of the expert network in MBA, and also participates in ad-Human Resources Management vanced programs in the fields of and professional development, Real Estate, Family Businesses, enEvolucion. Previously, she Audiovisual, Pharmacy, Comdeveloped her career at Hewle- munication, and In-Company tt-Packard, C.A.S.A., CapGemini, Programs. She also teaches at HAY Group, and Europraxis, in IED in the Communication and

#### **ALFONSO SAMPER** General Director at GOR FACTORY



General Director of GOR FAC-TORY. Throughout his career, he has held roles as General Director and CFO at the FINI GOLOSINAS Group, as well as Audit Specialist at KPMG (Big Four Audit Firms), where he audited more than 50 companies across various sectors, especially in finance, real estate, and industry.

#### **CARLOS TORREGROSA** Senior Vice President at Frumeca



He began his professional career at Filipini as a member of the Engineering Department, later joining HIMOINSA, where he was Head of the Engineering and R&D Department and eventually Project Director.

He joined GRUPO PRAMAC as Head of Engineering for the Power Engineering Division. He was promoted to Plant Manager at Pramac Ibérica, where he led production changes and the industrialization of products, achieving significant cost reductions, resource optimization, and quality improvements.

#### **BALVINDER SINGH POWAR**

Founding partner, board member, and director of BOOSTER Space Industries and AERDRON.



tworks in the world.

University of London. ILM accre- Commercial Space Industry. dited trainer. National Certificate in Labor Mediation, accredited by OCN.

Business Mentor at The Foun- Associate professor and buder Institute, one of the largest siness mentor at IE Business and most influential startup ne- School, he gives lectures around the world on leadership, conflict resolution, team Master in Conflict Resolution management and motivation, and Mediation Studies from the entrepreneurship, and the new

#### MIGUEL SOLDÁN BELDA

#### Founder & CEO of INTERLABORIS

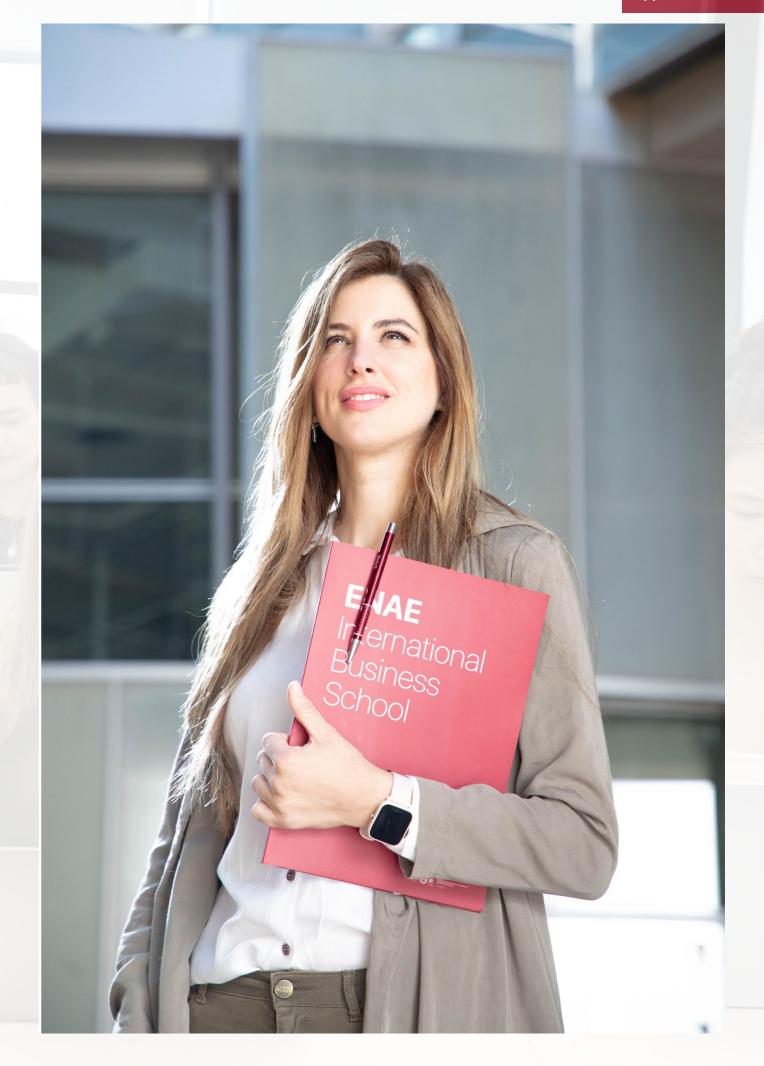


law firm. He later worked as HR the same institution. Manager at Ferrovial Conservación S.A. (FERCONSA), and sub- He is a member of the Spanish sequently at the Unión Española Association of Labor and Sode Explosivos Group as Director cial Security Law, a member of of Industrial Relations and then the Negotiation and Mediation as Human Resources Director of Center at IE Business School in UEE Europe.

the Naturener Group S.A. and is at IE. currently Managing Partner at Interlaboris Negociación S.L. He teaches Labor Law and Social Security in the Master's in Legal Advisory (MAJ) and Master's in Auditing programs at IE Business School in Madrid, and

His professional career began as Negotiation in the Master's in an associate at Sanahuja Cubel Human Resources program at

Madrid, and since 2003, he has directed the annual seminar He has served as HR Director at "Negotiation in the Labor Field"





# ENAE

International Business School

- > United States
- > Mexico
- > Guatemala
- > Honduras
- > El Salvador
- > Nicaragua
- > Costa Rica
- > Panama
- > Venezuela
- > Colombia
- > Ecuador
- > Peru
- > Bolivia
- > Dominican Republic
- > United Kingdom
- > Poland
- > Czech Republic
- > Netherlands
- > Italy
- > France
- > Morocco
- > China
- > India
- > Pakistan
- > Spain
- > Ghana



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