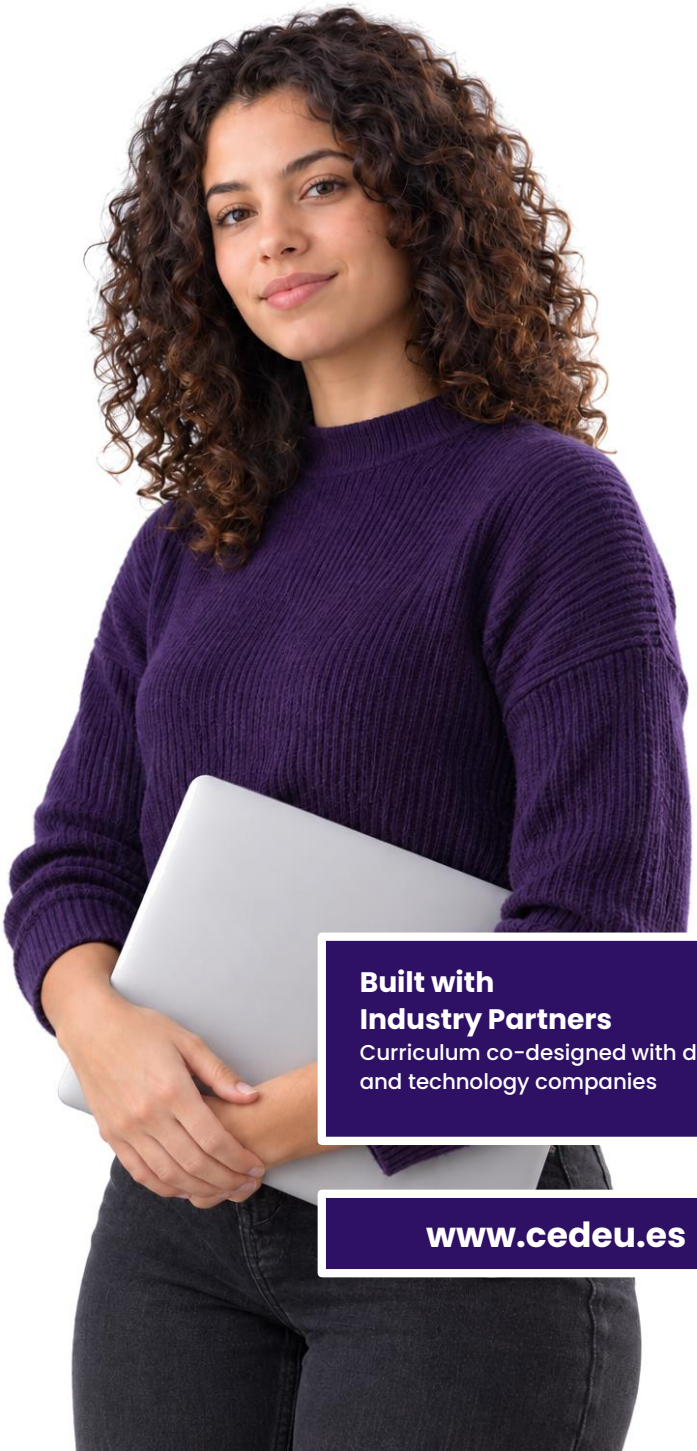
Bachelor in Data Science and AI

CEDEU UNIVERSITY

DATA SCIENCE
STATISTICS
ARTIFICIAL INTELLIGENCE



Built with Industry Partners
Curriculum co-designed with data and technology companies

www.cedeu.es

OUR INSTITUTION



Madrid Center Campus

CEDEU University College is one of the entities linked to the Foundation of Training and Future, founded in 1958. It has more than 40,000 students of 50 different nationalities

CEDEU UNIVERSITY COLLEGE is an official University College legally recognised by the Government of the Autonomous Community of Madrid:

- Registered as such in the Registry of Universities, Centres and Degrees of Spain (RUCT) of the Ministry of Education, Culture and Sport with the number 28053897.
- Registered at the European Commission with the PIC 917774716, with the ERASMUS+ E MADRID213 Code and with the registration number M567603.

At CEDEU we base our work on innovation, social transformation, the promotion of entrepreneurship and the empowerment of talent as vital pillars of our institution.

Madrid is the ideal City for university studies. CEDEU is located in the heart of the Salamanca district of Madrid, at Calle José Picón, number 7, with modern facilities.



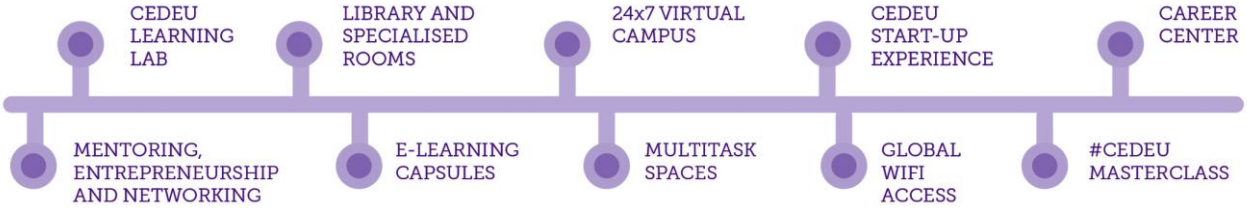
MADRID CAMPUS

CEDEU is located in the heart of Madrid, in Salamanca district, one of the most important financial and business centers in the world. It has a multitude of opportunities for employment and successful entrepreneurship.

Madrid Centre Campus is very accessible by public transport, bus and metro, it's next to Diego de León metro station and Avenida de América interchange. CEDEU Campus offers students and professors a privileged environment for learning and the intercultural development. It's 100% accessible, with the best facilities and services.

Madrid is the only city in the world that has nine World Heritage Sites less than two hours away, our city is one of the most important centres of art and culture in Europe and has one of the most active events schedules in the world.

Madrid is nowadays home to the largest corporate, technology and business headquarters in our country, making it one of Europe's most dynamic hubs for data, analytics and digital innovation.



WHY TO STUDY AT CEDEU?

1. Innovation and Excellence
2. Innovative Methodologies
3. Counseling and Mentoring
4. International Programs
5. Group of teaching staff experts
6. Internships from the First Year
7. Extracurricular Training
8. Scholarships and Grants
9. Madrid Center Location
10. Leadership and Professional Skills
11. Programs
12. Innovation and Differentiation Programs
13. #CEDEU Masterclass
14. Business Startup Competition
15. IBEX Serious Game
16. CEDEU Start-Up Experience
17. University Mentoring Program
18. Social Collaboration Program
19. Leadership & Professional Skills
20. CEDEU Business Game

PROFESSIONAL WARRANTY 10 CEDEU

Commitment

1 CEDEU supports the formation of leaders able to develop excellence, equity, social commitment, ethics and civic responsibility, inspired by humanist values and freedom of thought.

Experience

2 The experience of the Board of CEDEU and the Universidad Rey Juan Carlos in high-level studies allows us to ensure the optimum levels of quality required by current university legislation.

Network

3 CEDEU maintains institutional relations with numerous ethical and international associations, and applies the recommendations of companies and professionals for the benefit of its students.

Flexibility

4 Decentralised learning favours students with just-in-time learning methods. CEDEU adapts to fulfil the requirements of the participants in its university programmes.

Discipline

5 CEDEU's learning methodology demands a high level of commitment, responsibility and organisation, intrinsic qualities in today's professionals.

Methodology

6 CEDEU has developed a teaching methodology in which all the formative activities have been designed to meet the needs of students and the professional world.

Excellence

7 CEDEU's official university programmes have the favourable opinion of ANECA, and its English Programs share the same institutional commitment to quality.

Personalisation

8 The professor controls at any time the level of the student's participation, being able to detect his/her particular needs with a much more personalised attention.

Cost

9 CEDEU offers costs and a flexible financing system perfectly adapted to the reality of the environment to which our programmes are directed.

Interactivity

10 CEDEU is committed to the exchange of ideas, experiences and opinions by providing forums, chats, social networks and other participation tools.



TEACHING STAFF

CEDEU's teaching staff is formed by a team of professional experts with degrees and specialized professionals, both PhDs and data, analytics and technology practitioners with extensive experience in university education and in their professional activity.

Strong teacher-student relationships in corporate internships, plus Virtual Campus integration for online learning.



Built with Industry Partners

A curriculum co-designed with data and technology companies, two real Company Projects and a final internship to launch your career.

BACHELOR IN DATA SCIENCE AND AI

- Global Program
- 3 years · 180 ECTS
- Onsite · Madrid
- 100% in English
- Intake: October 2027
- €9,200 / year

Erasmus+ International Experience

Study one semester abroad at one of CEDEU's partner universities in Europe

Studying the Bachelor in Data Science and AI at CEDEU trains students to turn data into decisions, combining a solid foundation in mathematics and statistics with programming, machine learning and artificial intelligence.

The program follows a clear progression: from data analyst in the first year, to data scientist in the second, and data engineer in the third, with AI integrated throughout and two real projects with partner companies before the final internship.

STUDY PLAN

Year 1 — Data Analyst

SEMESTER 1

Programming I: Python Fundamentals	6
Linear Algebra	6
Descriptive Statistics	6
SQL Databases	6
Business and Economics Fundamentals	6

SEMESTER 2

Programming II: Advanced Python	6
Calculus and Numerical Methods	6
Probability and Inferential Statistics	6
NoSQL Databases	6
Algorithms and Data Structures	6

Total year 1 — **60 ECTS**

Year 2 — Data Scientist

SEMESTER 1

Data Mining and Predictive Modelling	6
Machine Learning I	6
Optimization	6
Advanced Statistics and Experimental Design	6
Data Visualization and Open Data	6

SEMESTER 2

Machine Learning II	6
Deep Learning	6
Text Mining, NLP and Social Network Analysis	6
Company Project I	6
AI Strategy and Business Impact	6

Total year 2 — **60 ECTS**

Year 3 — Data Engineer

SEMESTER 1

Productizing Models: from Model to Business	6
Big Data Technologies and Cloud Computing	6
Apache Spark	6
Company Project II	6
Data Governance, Security and AI Ethics	6

SEMESTER 2

Generative AI and Agents	6
External Internships	12
Final Degree Project	12

Total year 3 — **60 ECTS**

Global Program 3 years · 6 semesters · 100% in English — **180 ECTS**

YOUR LEARNING JOURNEY

YEAR 1

Data Analyst

Programming, databases and the mathematical foundations of data: linear algebra, calculus, probability and statistics.

Python · SQL · NoSQL · Statistics · Linear Algebra

YEAR 2

Data Scientist

Predictive modelling, machine learning, deep learning and natural language processing, plus the first project with a partner company.

Machine Learning · Deep Learning · NLP · Optimization

YEAR 3

Data Engineer

Big data, Spark, cloud and MLOps to take models into production, closing with Generative AI, internships and the Final Degree Project.

Apache Spark · Cloud · MLOps · Generative AI

WHAT MAKES THIS BACHELOR DIFFERENT

Applied Mathematics

1 A real mathematical backbone — algebra, calculus, probability, advanced statistics and optimization — so students understand how models work, not just how to use them.

AI across the curriculum

2 Artificial intelligence is present from ethics in year one to deep learning, NLP and a closing module on Generative AI and Agents.

Real Company Projects

3 Two projects with real data and real challenges from partner companies, building a professional portfolio before graduation.

Models into business

4 Students learn to deploy models and turn them into value for companies, with real cases of how data generates revenue.

From data to decisions.
From student to professional.

An English-taught Bachelor in the heart of Madrid, built with industry partners and designed for the careers that are shaping the future of every sector.

3 years

180 ECTS

2 Company Projects

100% in English

PROFESSIONAL OPPORTUNITIES



Bachelor's Degree in Data Science and AI

Data Analyst
Turning raw data into clear answers that support everyday business decisions.

Data Scientist
Building predictive models and algorithms to solve complex business problems.

Data Engineer
Designing the pipelines and databases that keep data flowing reliably.

Business Intelligence Analyst
Creating dashboards and KPIs that give management a real-time view of the business.

Statistician
Designing studies, experiments and A/B tests with rigorous statistical methods.

Research Data Scientist
Applying data and mathematics to research, science and innovation projects.

Cloud Data Engineer
Building scalable data platforms on AWS, Microsoft Azure and Google Cloud.

Quantitative Analyst
Modelling risk, pricing and forecasts in banking, insurance and finance.

Machine Learning Engineer
Developing, training and optimising machine learning and deep learning systems.

Data Consultant
Advising companies on data strategy, analytics and digital transformation.

Data Governance and Security
Ensuring data quality, privacy and compliance with GDPR and the EU AI Act.

MLOps Engineer
Deploying, monitoring and scaling models in production environments.

Marketing and Growth Analyst
Measuring campaigns and customer behaviour to drive business growth.

Data Architect
Defining how an organisation stores, integrates and structures its data.

NLP and Generative AI Specialist
Building chatbots, LLM applications and RAG systems for companies.

AI Entrepreneur
Launching new products and start-ups powered by data and artificial intelligence.

INTERNATIONAL EXPERIENCE

Students can choose to study one semester at one of the European universities with which CEDEU has exchange agreements through the Erasmus+ programme.



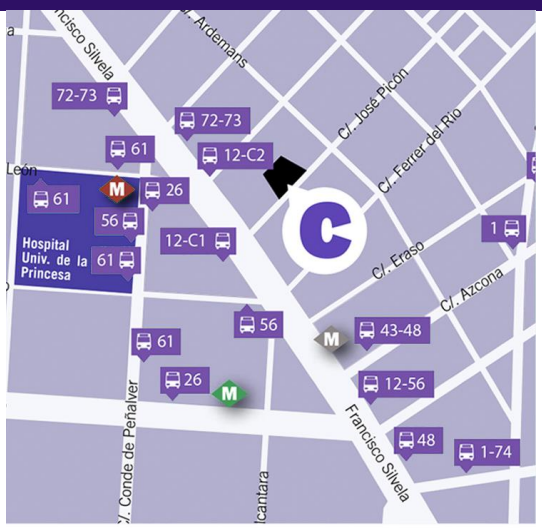
- AMBIS VYSOKA SKOLA AS, INTERNATIONAL OFFICE | **CZECH REPUBLIC**
- FACHHOCHSCHULE BURGENLAND GMBH | **AUSTRIA**
- HAUTE ECOLE LUCIA DE BROUCKERE | **BELGIUM**
- IBS NEMZETKOZI UZLETI FOISKOLA | **HUNGARY**
- INSTITUTO SUPERIOR DE ADMINISTRAÇAO E GESTAO | **PORTUGAL**
- ISAG, EUROPEAN BUSINESS SCHOOL | **PORTUGAL**
- KLAIPEDOS VALSTYBINE KOLEGIJA | **LITHUANIA**
- LIBERA UNIVERSITA MARIA SANTISSIMA ASSUNTA | **ITALY**
- TRANSILVANIA UNIVERSITY OF BRASOV | **ROMANIA**
- UNIVERSITA DEGLI STUDI DEL MOLISE | **ITALY**
- UNIVERSITÉ DE LORRAINE - FACULTÉ DE DROIT, ECONOMIE ET ADMINISTRATION | **FRANCE**
- UNIVERSITÉ DE LORRAINE - INSTITUT SUPERIEUR FRANCO ALLEMAND DE TECHNIQUES ET D´ECONOMIE | **FRANCE**
- UNIVERSITY LAZARSKIEGO | **POLAND**
- VICENT POL UNIVERSITY. AKADEMIA NAUK STOSOWANYCH WINCENTEGO POLA W LUBLINIE | **POLAND**
- VISSHE UCHILISHTE PO MENDZHMANT | **BULGARIA**

*This list of University Institutions can be modified according to the environment and university activity.

WHERE CEDEU GRADUATES WORK

Bachelor in Data Science and AI

DATA SCIENCE
STATISTICS
ARTIFICIAL INTELLIGENCE



L4 L5 L6

Diego de León

12-26-43-48-56-61-72-73-74-C1-C2

STUDENTS FROM ALL OVER THE WORLD TRUST US

Since its foundation, CEDEU has been teaching students of more than 50 nationalities.



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CEDEU UNIVERSITY

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