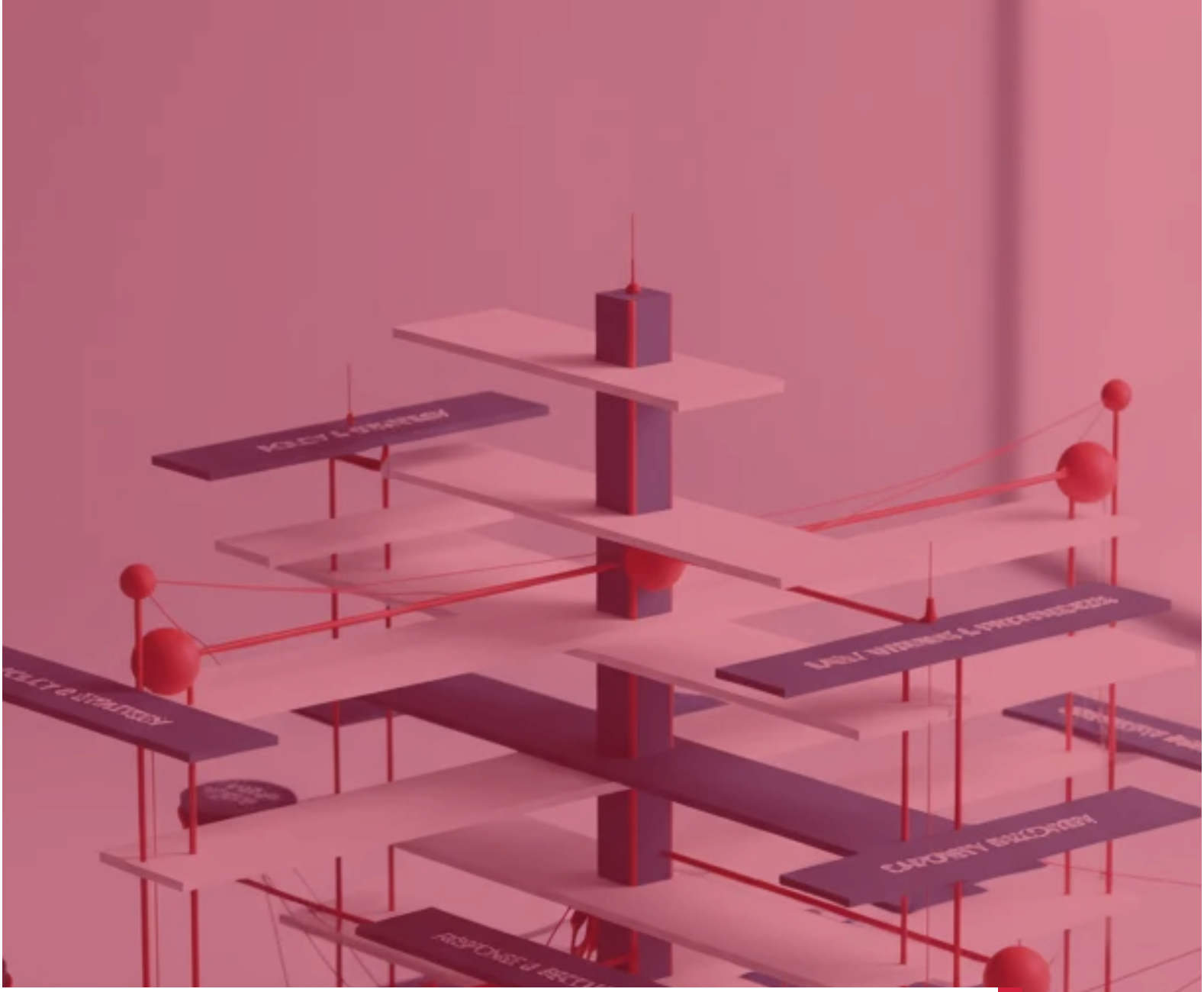


Máster online 100%

Master in Disaster Risk Management and Climate Governance + 60 ECTS Credits

Structuralia

Máster online 100%

Master in Disaster Risk Management and Climate Governance + 60 ECTS Credits

Modality
Online

Languages
Español

Duration
1500 hours (60 ECTS)

No Limit
AI Assistant

Does it include practices?
NO

Educational Institutions

Structuralia Engineering eLearning

UNIVERSIDAD NEBRIJA

Summary

The Master in Disaster Risk Management and Climate Governance is a high-level specialization for experienced professionals seeking to deepen the prevention and response to extreme events. This program provides you with a systemic framework for disaster risk management and climate adaptation, offering you conceptual and practical tools to address the challenges posed by natural disasters and climate variability. Through a process and strategy approach, you will develop a comprehensive perspective for risk management and climate resilience, implementing prospective and corrective actions. You will understand how social, cultural, economic and institutional conditions shape risk, allowing you to design adapted and resilient interventions. This master's degree equips you to analyze and apply effective measures, from the conceptualization of risk knowledge to the implementation of advanced solutions. You will prepare to lead the necessary evolution in an environment of growing uncertainty, integrating climate governance into each strategic decision. You will address financial risk management, an essential element for the sustainability of any strategy.

With this training, you will update your knowledge and redefine your ability to influence policies and programs, ensuring effective and anticipatory management in the face of environmental challenges.

Agenda

MODULE 1. CONCEPTS AND CONTEXT OF DISASTER AND CLIMATE CHANGE MANAGEMENT AND RISK

1. DIDACTIC UNIT 1. RISK MANAGEMENT AND CLIMATE CHANGE MANAGEMENT

1. International Context of Disaster Risk Management (Sendai Framework for Disaster Risk Reduction)
2. International Context of Climate Change ((The IPCC: generalities and climate change scenarios)
3. Concepts related to Disaster Risk Management and Climate Change. Articulation levels.
4. Lines of Action for Risk Management, and structural and non-structural risk interventions
5. Risk Management by scenarios

2. DIDACTIC UNIT 2. DISASTER RISK AND CLIMATE CHANGE

1. Generalities of Climate Change (Physical Bases of Climate Change)
2. The IPCC. Generalities and Climate Change Scenarios
3. Relationship development - risk - disasters (the construction of risk) and the effects and impacts of climate variability and climate change.
4. Extensive and intensive risks, the effects of climate variability and climate change, and their impact on human development
5. Inequalities and conditions of vulnerability and the impacts and effects of climate variability and climate change.

3. DIDACTIC UNIT 3. SYSTEMIC APPROACH TO RISK MANAGEMENT AND CLIMATE CHANGE MANAGEMENT

1. Areas for Risk and Climate Change Management (from institutional to sectoral, private, territorial, community sectors)
2. Actors and actions for disaster risk management
3. Planning instruments for Risk Management and Climate Change
4. Institutionality, entities and organizations for the execution and monitoring of actions.
5. Adaptation and mitigation strategies for Climate Change

4. DIDACTIC UNIT 4. APPROACH TO PROCESSES AND STRATEGIES FOR COMPREHENSIVE MANAGEMENT OF DISASTER RISK AND CLIMATE CHANGE

1. What does the Process-based approach imply (the change in the approach to emergency and disaster care) in the context of climate variability and climate change.
2. Strategic Processes (Planning, Organization and Monitoring)
3. Missional Processes (Knowledge, Reduction Preparation/execution)
4. Support Process (Strengthening of knowledge and capabilities of Human Resources, Public Communication, information for decision making and Information Systems)
5. Strategies for comprehensive disaster risk management in the context of climate variability and climate change.

MODULE 2. PROSPECTIVE AND CORRECTIVE MANAGEMENT OF DISASTER RISK

1. DIDACTIC UNIT 1. CONTEXT AND CONCEPTUALIZATION OF RISK KNOWLEDGE FOR ITS PROSPECTIVE AND CORRECTIVE MANAGEMENT.

1. Disaster risk management
2. Internal context for disaster risk management.
3. The external context for disaster risk management.
4. Context of the disaster risk management process.
5. Disaster risk criteria.

2. DIDACTIC UNIT 2. RISK ASSESSMENT FOR PROSPECTIVE AND CORRECTIVE MANAGEMENT.

1. Disaster risk identification.
2. Disaster risk analysis.
3. Disaster risk assessment.
4. Disaster risk monitoring
5. Illustrative examples of disaster risk assessment.

3. DIDACTIC UNIT 3. RISK REDUCTION THROUGH PROSPECTIVE INTERVENTIONS.

1. Context and conceptualization of disaster reduction.
2. Current and future risk reduction processes.
3. Prospective intervention
4. Reduction measures - prospective intervention (future risk).
5. Resilience for disaster risk reduction.

4. DIDACTIC UNIT 4. RISK REDUCTION THROUGH CORRECTIVE INTERVENTIONS.

1. Corrective intervention (mitigation of current risk).
2. Reduction of vulnerability and increase of capacities and resilience, through structural and non-structural measures.
3. Financial protection.
4. Social actors facing disaster risk reduction.
5. Illustrative examples of corrective interventions.

MODULE 3. CLIMATE VARIABILITY AND CLIMATE CHANGE

1. DIDACTIC UNIT 1. CLIMATOLOGY CONCEPTS

1. Climate: definition
2. Climate: elements and factors
3. Climatology: study methods
4. The climate system

2. DIDACTIC UNIT 2. RADIATION, LAND ENERGY BALANCE. TEMPERATURE

1. General concepts
2. Radiation
3. Solar type radiation
4. Earth's energy balance
5. Solar radiation and its spatial distribution
6. Incident radiation at a point: calculation
7. Temperature

8. Natural greenhouse effect: gases and mechanisms
9. Disturbances in the energy balance: natural and human causes

3. DIDACTIC UNIT 3. CLIMATE AND ITS CLASSIFICATION

1. Climate and generalities
2. Climate classification based on temperatures and precipitation
3. The Koppen classification
4. Strahler's classification
5. Types of climates
6. mountain climates
7. Historical climate events: Little Ice Age, Medieval Climate Optimum
8. Methods for reconstructing past climate: climate witnesses

4. DIDACTIC UNIT 4. THE LIMITS OF THE PLANET

1. Biodiversity, "finitude" of natural resources and "irreversibility" linked to extinction
2. Renewable resources. Overexploitation of them today
3. Conflicts over renewable resources and environmental refugees

5. DIDACTIC UNIT 5. THE DEPLETION OF NON-RENEWABLE RESOURCES

1. Non-renewable resources, minerals and energy resources
2. The problems generated by its use and the conflicts over its control

6. DIDACTIC UNIT 6. CLIMATE CHANGE

1. Evidence of current climate change
2. Future projections for the average temperature of the planet according to the evolution of Greenhouse Gas emissions
3. Impoverished countries are and will be the most affected, the regions and ecosystems that will be especially affected by climate change, and the projections of the economic effects of climate change at a global level
4. The fight against climate change is possible, and is based on global action, mitigation and adaptation

7. DIDACTIC UNIT 7. CLIMATE MODELING: FUTURE SCENARIOS AND PROJECTIONS

1. History and evolution of climate modeling
2. Components of climate models
3. Types of climate models
4. Reference scenarios
5. IPCC and CMIP6 simulations
6. Projections of key climate variables

8. DIDACTIC UNIT 8. CARBON FOOTPRINT AS A METER OF CHANGE

1. Evolution of the carbon footprint concept
2. International regulations and standards
3. Carbon footprint categories
4. Scope of application and calculation objects
5. What is Life Cycle Analysis?

9. DIDACTIC UNIT 9. COMPENSATION. CLIMATE NEUTRALITY AND DECARBONIZATION STRATEGIES

1. Climate neutrality and Net Zero goals
2. Reduction or compensation strategies?
3. Carbon offset mechanisms
4. Carbon markets and emissions trading systems

10. DIDACTIC UNIT 10. KEYS TO SUSTAINABLE ADAPTATION

1. Difference between mitigation and adaptation
2. Local, national and global adaptation strategies
3. Climate resilient infrastructure and ecosystem-based solutions
4. Integration of climate change in territorial and sectoral planning

MODULE 4. ICT AND GIS APPLIED IN DISASTER RISK MANAGEMENT AND CLIMATE CHANGE

1. DIDACTIC UNIT 1. INTRODUCTION. COMPUTING, GIS, GPS, BD, TELECOM.

1. Introduction to computing and technological advances.
2. Database, data storage, database administration.
3. GIS, GPS, Coordinate Systems.
4. Use of Google Earth Pro to locate coordinates and maps.
5. GPS Essentials collecting data from the Android phone's GPS.

2. DIDACTIC UNIT 2. BASIC TOOLS FOR COLLECTION OF GEOLOCATED DATA IN A DATABASE.

1. Creating a collection form, recommendations for creating the storage structure.
2. Using Kobotoolbox.
3. Use of typeform.
4. Use of GISCLOUD.
5. Using the Fulcrum App.

3. DIDACTIC UNIT 3. USE OF QGIS DESKTOP TOOLS AND WMS AND WFS GEOSERVICES.

1. Basic QGIS Tools (I)
2. Basic QGIS Tools (II)
3. What are WMS or WFS Geoservices?
4. Creating WMS or WFS services with GeoServer (I)
5. Creating WMS or WFS services with GeoServer (II)

4. DIDACTIC UNIT 4. CREATION OF MAPS, LAYERS: CARTOGRAPHY, CADASTRE, CENSUS, AND GIS ANALYSIS TO OBTAIN THREAT, VULNERABILITY AND RISK MAPS.

1. List of Cadastre, censuses, cartography with Risk Management.
2. Creation of land use and vital infrastructure maps.
3. GIS analysis with QGIS and demonstration with ArcGIS Desktop.
4. Susceptibility maps, threats, vulnerability and risk maps. Their differences and types of maps, preparation methodologies.

5. Climate models and climate prospecting.

MODULE 5. FINANCIAL MANAGEMENT OF DISASTER RISK AND CLIMATE FINANCE

1. DIDACTIC UNIT 1. CONTEXT AND CONCEPTUALIZATION ON FINANCIAL PROTECTION FROM DISASTER RISK AND CLIMATE FINANCE

1. Conceptualization of financial protection from disaster risk
2. Conceptualization of climate finance
3. Disaster risk financial protection and climate finance as a component of fiscal management
4. Legal framework for financial protection from disaster risk and international agreements related to climate finance
5. Benefits of pooling risks

2. DIDACTIC UNIT 2. FINANCIAL PROTECTION FROM DISASTER RISK AND CLIMATE CHANGE CRITERIA IN PUBLIC INVESTMENT

1. Financial protection strategies against disaster risk
2. Risk retention instruments in the event of disasters
3. Risk financing instruments in the event of disasters
4. Risk transfer instruments in the event of disasters
5. Disaster risk analysis and climate change criteria in the public investment process

3. DIDACTIC UNIT 3. FINANCIAL PROTECTION FROM DISASTER RISK IN PRIVATE INVESTMENT

1. Risk administration or management
2. Introduction to insurance
3. Types of insurance
4. Business continuity plans in the event of disasters
5. The vision of the financial sector regarding environmental and social risks

4. DIDACTIC UNIT 4. CLIMATE FINANCE

1. Possible impacts of climate events
2. Inclusion of climate event considerations in the planning process
3. Financial instruments to face the occurrence of climate events
4. Tax management to promote adaptation to climate change
5. Green bonds and green climate fund

MODULE 6. DISASTER MANAGEMENT AND RECOVERY

1. DIDACTIC UNIT 1. CONTEXT AND CONCEPTUALIZATION ON DISASTER MANAGEMENT AND RECOVERY WITH A DEVELOPMENT APPROACH

1. Conceptualization of emergencies and disasters
2. Conceptualization of recovery with a development approach
3. The context of disaster management and recovery with a development approach
4. The response, recovery, and effects and impacts of climate variability and climate change
5. Cross-cutting issues in disaster management and recovery with a development approach

2. DIDACTIC UNIT 2. DISASTER MANAGEMENT AND RECOVERY PLANNING

1. Processes for disaster management and recovery
2. Preparations and alerts
3. Emergency response processes
4. The post-disaster recovery planning process
5. Territorial levels and work sectors

3. DIDACTIC UNIT 3. INFORMATION MANAGEMENT AND EVALUATIONS FOR RESPONSE AND RECOVERY

1. The information for the answer
2. Tools and needs assessment for response
3. Information management for recovery with development approaches
4. Assessment of damage, loss and recovery needs
5. Recovery: evaluations from government sectors, the role of the private sector and communities

4. DIDACTIC UNIT 4. STRATEGIES AND INSTRUMENTS FOR DISASTER MANAGEMENT AND RECOVERY WITH A DEVELOPMENT APPROACH

1. Strategies for disaster management and the humanitarian agenda
2. Instruments for responding to emergencies and disasters
3. Strategies for post-disaster recovery with a development approach
4. Instruments for planning and implementing post-disaster recovery with a development approach
5. Technical and resource needs for the implementation of response and recovery actions

MODULE 7. CLIMATE GOVERNANCE

1. DIDACTIC UNIT 1. WHY IS CLIMATE GOVERNANCE NECESSARY?

1. What is governance?
2. Differences between government, governability and governance
3. Social governance, environmental governance and climate governance
4. Scales of climate governance: global, regional and local governance
5. Governance gaps

2. DIDACTIC UNIT 2. LOCAL GOVERNANCE, COUNTRIES, CITIES AND COMMUNITIES

1. Needs for effective responses to climate change in countries with diverse contexts
2. Barriers to climate action
3. Local governance (countries and cities)
4. Local governance (communities)
5. Examples from some countries and territories

3. DIDACTIC UNIT 3. GOVERNANCE IN SOME STRATEGIC SECTORS

1. Agricultural governance
2. Examples of agricultural governance
3. Water governance
4. Examples on water governance
5. Climate governance in coastal areas

4. DIDACTIC UNIT 4. CAPACITIES AND CHALLENGES FOR CLIMATE GOVERNANCE

1. Necessary transformations in states, opportunities, challenges and challenges
2. Vision of other actors present in the territory
3. Participatory governance and consultation processes
4. Governance systems for sustainable development
5. Climate governance and disaster risk governance

MODULE 8. INSTRUMENTS TO MITIGATE GLOBAL WARMING

1. DIDACTIC UNIT 1. THE CLOSE RELATIONSHIP BETWEEN GREENHOUSE GASES AND GLOBAL WARMING

1. air pollution
2. Global warming and climate change
3. Global greenhouse gas emissions
4. What is mitigation?
5. Policy approaches to mitigation

2. DIDACTIC UNIT 2. INTERNATIONAL MITIGATION MECHANISMS

1. Nationally determined contributions
2. Trading of emission rights or carbon credits
3. Clean development mechanisms
4. Joint action and adaptation fund
5. Compensation mechanisms based on the non-market - voluntary market

3. DIDACTIC UNIT 3. SECTOR MITIGATION STRATEGIES

1. Energy sector
2. Industrial sector
3. Transportation sector
4. Housing and construction sector
5. Agriculture, forestry and other land uses sector

4. DIDACTIC UNIT 4. BENEFITS AND OPPORTUNITIES OF MITIGATION

1. Mitigation in the Asian region
2. Mitigation measures in the American continent
3. Mitigation measures in the African region
4. Mitigation measures in Europe
5. Mitigation measures in Oceania

MODULE 9. INSTRUMENTS FOR ADAPTATION TO CLIMATE CHANGE

1. DIDACTIC UNIT 1. EXPECTED RISKS DUE TO CLIMATE CHANGE IN THE DIMENSIONS OF ANALYSIS AND VULNERABILITY

1. Risk due to climate change in water resources
2. Risk due to climate change on biodiversity and ecosystem services
3. Risk due to climate change in food security and productive systems
4. Climate change risk in human settlements and infrastructure
5. Risk of climate change on human health

2. DIDACTIC UNIT 2. ADAPTATION TO CLIMATE CHANGE

1. What is adaptation to climate change? Resilience
2. Climate change adaptation approaches
3. Climate change adaptation options
4. Implementing adaptation
5. The fine line between development and adaptation

3. DIDACTIC UNIT 3. INTERNATIONAL EXPERIENCES IN ADAPTATION

1. THE UNFCCC: International commitments and progress in adaptation
2. The Warsaw International Mechanism on Loss and Damage
3. Some international strategies: Euroclima +
4. National adaptation action programs and national adaptation plans
5. Cities and adaptation to climate change

4. DIDACTIC UNIT 4. ADAPTIVE SECTOR STRATEGIES

1. Adaptive strategies in the comprehensive management of water resources
2. Adaptive strategies in biodiversity and ecosystem services
3. Adaptive strategies in human settlements and infrastructure
4. Adaptive strategies in products and food safety
5. From climate action to the climate crisis: where are we going?

MODULE 10. TFM. MASTER IN DISASTER RISK MANAGEMENT AND CLIMATE GOVERNANCE

Qualification

University Degree in Master of Lifelong Training in Disaster Risk Management and Climate Governance issued by the Antonio de Nebrija University with 60 ECTS University Credits. Teachings not leading to obtaining an official qualification

Objectives

- • Lead the conceptualization of risk management and climate policy, integrating a systemic approach to extreme events. • Design comprehensive strategies for risk mitigation and adaptation to climate change, applying advanced process methodologies. • Implement prospective and corrective risk management actions and measures, identifying the specific needs of each context. • Evaluate the impact of threats and climate variability on social, cultural, economic and institutional conditions, to inform decision-making. • Manage the conceptualization and knowledge of risk, transforming data into strategic information for prevention. • Make strategic decisions in disaster financial management, optimizing the allocation of resources for resilience. • Integrate the climate governance perspective into the planning and execution of vulnerability reduction projects. • Develop action frameworks that consider disaster risk as a continuous process, adapting to dynamic contexts.

What does it prepare you for?

This program prepares you to lead the formulation and implementation of advanced strategies in comprehensive disaster risk management. The Master in Disaster Risk Management and Climate Governance trains professionals in the formulation and implementation of advanced strategies for the resilience of communities and complex systems. You will develop a critical capacity to analyze the social, cultural, economic and institutional context that shapes risk, integrating climate variability and adaptation to climate change in each strategic decision. You will acquire the necessary tools to design and implement prospective and corrective management actions, anticipating risk scenarios and mitigating their potential impacts. It will allow you to make strategic decisions based on a systemic approach, rigorously evaluating the impact of policies and programs on the resilience of communities. Finally, it will train you to manage climate governance on an international scale, understanding its mechanisms and measures to direct effective interventions and promote sustainable development.

Who is it addressed to?

This program is aimed at professionals from sectors such as engineering, architecture, earth sciences, economics, social, environmental, ecology, sociology, biology, hydrology, education and geography. If you are seeking advanced specialization to address the challenges of disaster risk management and climate policy, and have an interest in environmental risk mitigation and emergency planning, this program offers you the strategic tools. It is for you if you want to update your skills and acquire a broad perspective that allows you to influence decision-making on climate change and the resilience of communities and systems.

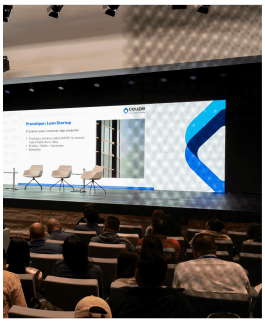
Official Character

This training is not included within the scope of official regulated training (Early Childhood Education, Primary Education, Secondary Education, Official Vocational Training FP, Baccalaureate, University Degree, Master University Officer and Doctorate). It is therefore a complementary and/or specialization training, aimed at the acquisition of certain competencies, skills or aptitudes of a professional nature, which can be assessed as merit in job boards and/or competitive examinations, always within the section of Complementary Training and/or Continuous Training. It is always essential to review the specific grading requirements of the specific public job boards to which we wish to apply.

Professional Outings

- Specialization in risk management and climate governance will position you to assume highly responsible roles in various organizations. You will be able to lead teams as Director of Resilience and Adaptation to Climate Change Programs in international NGOs or development agencies. You will serve as a Senior Catastrophic Risk Management Consultant, advising public entities and private companies in the evaluation and mitigation of threats. You can also hold the position of Head of Strategic Planning in government organizations or research institutions, coordinating the response to extreme events and promoting climate governance policies. Your expertise will also allow you to work as a Principal Environmental Risk Analyst in specialized consulting firms or sustainability departments, developing predictive models for making informed and strategic decisions.







Live Madrid

Live the International Week

As an additional complement to your training, you can be part of the SIM: Week International in Madrid. A unique meeting that brings together students from all over the world. For seven days you can live an academic and cultural experience in the heart of Europe, culminating with the graduation ceremony in Madrid.

- Conferences and workshops with international experts
- Visits to companies and reference organizations
- Networking with students from different countries
- Cultural activities and discovery of Madrid
- graduation ceremony

Structural

Structuralia is a leading educational institution in postgraduate and highly specialized online training, focused on the fields of engineering, architecture, construction, energy, technology and digital transformation.

Founded in 2001 with a strong industrial DNA, the result of collaboration between large companies in the sector and the Universitat Politècnica de Catalunya (UPC), for more than 25 years we have accompanied technical professionals in their academic and professional development through practical, flexible training aligned with the reality of the labor market.

Our training proposal connects advanced technical knowledge, real employability and international projection, acting as key support in the professional evolution of those seeking to specialize, grow professionally and generate impact in their sector, with a firm commitment to the democratization of access to technical excellence.



+350.000

Students have gone through our virtual classrooms



+20 years

Experience in the training sector



5 stars

QS ranking in online education

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EDUCA LXP is more than a methodology, it is a completely educational experience personalized thanks to all the possibilities offered by artificial intelligence. Now the content adapts to you, your needs and preferences, while offering you access to updated and practical content that really makes a difference in the labor market.

Flexibility

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Didactic approach oriented to work by competencies, which favors practical and meaningful learning.

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When you enroll in a course or master's degree, you will get a free subscription to MyLXP while your training lasts

You will have access to more than 400 key courses (soft skills, languages, competencies digital, etc.) and other surprises. Sign up and see how MyLXP improves your learning.

Meet PHIA, your personalized learning assistant

Use all the possibilities of artificial intelligence to get the most out of it match to your training

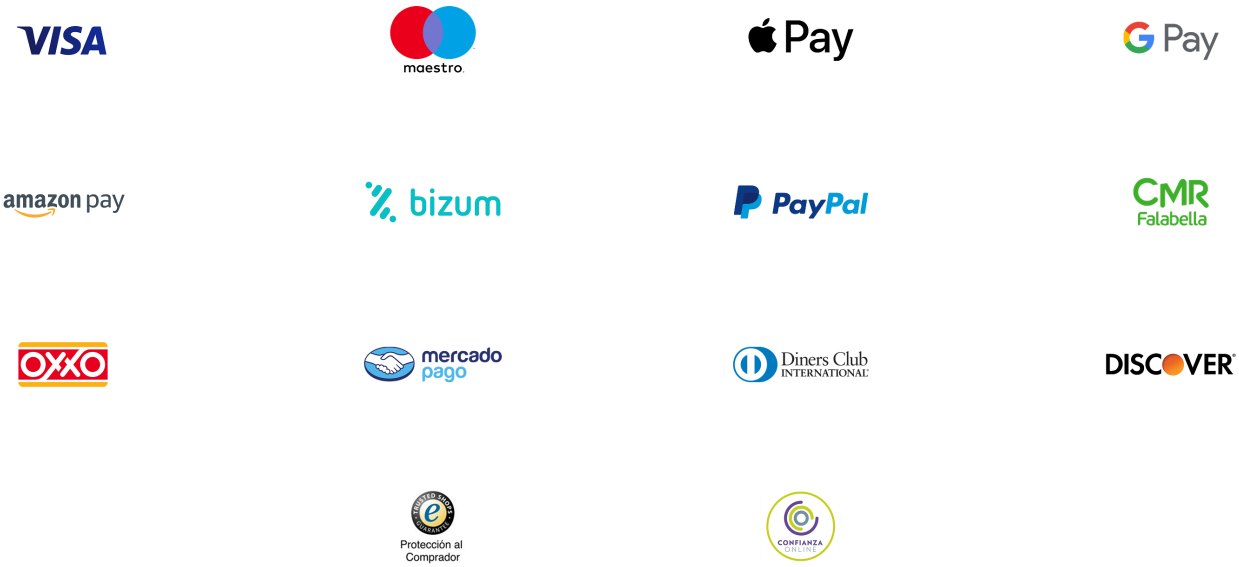
EDUCA EDTECH Group leads the digital revolution in education, promoting the continuous learning and technological transformation. The group is made up of recognized training institutions and its mission is to democratize access to education, promote the transfer of knowledge, technological development and research.

With the experience accumulated over more than 20 years, we have perfected our learning platform EDUCA LXP (Learning Experience Platform), the basis of our educational methodology, which provides students with online training practical and meaningful.



Discover all the payment facilities

We adapt to all international payment methods.



Funding and scholarships

Finance your course or master's degree and enjoy the available scholarships. Contact our expert team to know which one best suits your profile.

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Alumni Scholarship

15%
Scholarship recommended

20%
Functional Diversity Scholarship

20%
Unemployment scholarship

15%
GROUP Scholarship

20%
Scholarship for Professionals, Healthcare, members

15%
Entrepreneurship Scholarship

20%
Large Family Scholarship