Structuralia
Engineering eLearning

UNIVERSIDAD
NEBRIJA

Master´s Degree in Quality, Environment, and Safety in Construction Settings + 60 ECTS Credits





Choose to learn at school
leader in online training

INDICE

1 | About **Structuralia**

2 | **Alliance**

3 | **Rankings**

4 | By **EDUCA EDTECH Group**

5 | LXP **Methodology**

6 | **Why choosing** Structuralia?

7 | Trainning **program**

8 | **List of Subjects**

9 | **Contact**

ABOUT STRUCTURALIA

Structuralia is an online educational institution offering highly specialized postgraduate programs in engineering, infrastructure, construction, energy, building, digital transformation, and new technologies. Since our founding in 2001, we have been committed to providing quality training for the professional development of **engineers, architects, and STEM professionals.**

We provide a platform where you can acquire new skills and enhance your knowledge without being limited by time or location. Our methodology ensures an engaging, interactive, and **supportive educational experience,** equipping our students to meet future challenges in their respective fields of work.

More than **20** years of experience

Over **200k** student have learnt with us

More than **90** nationalities among our students



Specialize to
advance your career

STRUCTURALIA ALLIANCE AND NEBRIJA UNIVERSITY

Structuralia and the University of Nebrija successfully consolidate a strategic partnership. Thus, the collaboration between Structuralia and the University of Nebrija promotes a collaborative, innovative and accessible approach towards learning that is adapted to the individual needs of students.

The two institutions prioritize practical and flexible learning, adapted to the demands of today's working world, and which promotes the personal and professional development of each student. The purpose is to acquire new knowledge in a dynamic and didactic way, which facilitates its retention and contributes to developing the necessary skills to be ready to take part in a society in constant and rapid transformation.

Structuralia and the University of Nebrija have set as their main objective the democratization of education to bring it to even the most remote areas and taking advantage of the latest technological innovations. In addition, they have a team of highly specialized teachers and learning platforms that incorporate cutting-edge educational technology to provide academic support throughout the entire educational process.



STRUCTURALIA RANKINGS

Structuralia has achieved the recognition of different national and international rankings, thanks to its commitment to **democratize education** and bet on educational innovation to **achieve excellence.**

For the elaboration of these rankings, **indicators** such as online and offline reputation, the quality of the institution, social responsibility, educational innovation or the profile of professionals are used.















QS, seal of academic excellence

Structuralia: 5 stars in online education

BY EDUCA EDTECH

Structuralia is a brand endorsed by **EDUCA EDTECH Group,** which is composed of a group of experienced and recognized **educational institutions of online training.** All the entities that make it up share the mission of **democratizing access to education** and are committed to knowledge transfer, technological development and research.

EDUCA EDTECH Group

ONLINE EDUCATION

EUROINNOVA INTERNATIONAL ONLINE EDUCATION

inesem business school

INEAF BUSINESS SCHOOL

red educa.net

inesalud

EDU SPORT

EDUCA business school

ESIBE ESCUELA IBEROAMERICANA DE POSTGRADO

Educa.Pro

ceupe European Business School

UDAVINCI

CAPMAN testing solutions

Structuralia Engineering eLearning

UNIMIAMI International University of Miami

Educa PHAROS

LXP METHODOLOGY

The **EDUCA LXP** methodology enhances the learning experience by incorporating AI into e-learning processes. It utilizes highly customized predictive models based on the analysis of student interactions with their virtual environments.

EDUCA LXP is the outcome of **Research Results Transfer** from multiple interdisciplinary R&D+i projects, involving international universities dedicated to knowledge transfer, technological development and research.



1. Flexibility

100% online and flexible learning, allowing students to study where, when and how they want.



2. Accessibility

We believe in making education accessible to all, working to ensure that everyone has the opportunity to continue their learning journey.



3. Personalization

We offer customized learning paths tailored to each student's unique needs and preferences.



4. Accompaniment / Academic mentoring

Guidance and support. Our team of expert teachers provides academic guidance, advocating for educational quality and adapting to the needs of the ever-changing labor market.



5. Innovation

We are at the forefront of technological development, constantly evolving with AI-driven Learning Experience Platforms.



6. Educational excellence

Our didactic approach focuses on competence based learning, promoting practical and meaningful learning experiences to ensure professional development.



Programs

Our own university and official programs

WHY CHOOSIG STRUCTURALIA

1. Our Experience

- ✓ More than **20 years of experience**.
- ✓ More than **200.000 students** have already learnt in our virtual classrooms.
- ✓ More than **90 nationalities** among our student body.

2. Our Team

Currently, Structuralia has a team of **more than 550 professionals working in the STEM (Science, Technology, Engineering and Mathematics)**. Our staff is solidly framed in a structure that facilitates the highest quality in the attention to students.

3. Our Methodology



100% ONLINE

Study at your convenience, wherever you are. Access our virtual campus from any device.



LEARNING

We strive for a deep integration of new knowledge into your cognitive framework.



TEAM TEACHERS

Structuralia has a team of professionals to elevate your study experience with topquality education.



NOT BE ALONE

Receive continuous guidance from our tutoring team throughout your student journey.

4. AENOR Quality

- ✓ We are Collaboration Agency Nº99000000169 authorized by the Ministry of Employment and Social Security.
- ✓ Annual external audits are carried out to ensure the highest quality by AENOR.
- ✓ Our teaching processes are certified by AENOR under ISO 9001.

Master´s Degree in Quality, Environment, and Safety in Construction Settings + 60 ECTS Credits



LENGHT
1500 horas



MODE
ONLINE



ASSISTANCE
PERSONALIZED



CREDIT
60 ECTS

Certificacion

Master´s Degree in Quality, Environment, and Safety in Construction Settings with 60 ECTS Credits awarded by the Antonio de Nebrija University. Teaching not leading to an officially accredited qualification



Description

Quality, environment, safety, and health are basic business management elements that ensure all regulatory and contract requirements are met adequately. They are also essential efficiency, client satisfaction and loyalty tools.

Goals

The overall objective is for the student to develop adequate Quality, Environment and Health and Safety strategies, as well as to lead and coordinate teams comprehensively for the company to meet its goals. It also seeks to improve customer satisfaction, environmental management and workers' safety and health to enhance their performance. Additionally, the program aims to facilitate the access to knowledge and the development of skills to obtain management system certifications that allow businesses to: participate in project tenders, resume business relationships with former clients, improve efficiency for higher competitiveness, and guarantee project sustainability. This overall objective will be achieved through the following specific objectives: Understand Quality, Environment, Health and Safety contexts, and their business applications to lead improvement strategies. Implement, maintain and certify Quality, Environment and Health and Safety management in the company and thus, achieve objectives systematically. Prepare and apply quality, environment, health, and safety plans the company's control and improvement activities. To integrate management systems in order to optimize processes and resources.

What does it prepare you for?

It also contributes to strengthening capabilities related to these areas for positions such as operations director Other positions this program can contribute to include Technical, Corporate, Sustainability and HHRR Directors, and Organization Coordinators/Directors/Officers.

Who is the target audience?

This Master’s degree is designed to provide an ample view of all these concepts and a deep understanding of their application in design and implementation.The program has been developed by highly experienced professionals to facilitate the acquisition of the necessary capabilities to establish and manage quality, environment, safety and health systems. It also aims at contributing to business strategic finance, HHRR, social, natural and reputation objective

Job opportunities

This Master’s degree facilitates the access to career opportunities such as Quality/Environment/Safety/Health Coordinators/Directors in construction, promotion, engineering, and architecture companies.

List of subjects

MODULE 1. QUALITY MANAGEMENT. QUALITY ASSURANCE

MODULE 2. QUALITY CONTROL IN PROJECT DESIGN AND IMPLEMENTATION

UNIT 1. RISKS, THE PLANNING PROCESS, AND INTRODUCTION TO QUALITY PLANNING IN CONSTRUCTION PROJECTS

1. Introduction
2. Risk and opportunities in construction projects
3. Project design and development quality control
4. Construction project quality planning

UNIT 2. DETAILED QUALITY PLANNING AND ITS APPLICATION DURING PROJECT IMPLEMENTATION

1. Implementation resource organization
2. Specification, methods, and template development
3. Procurement control
4. Supplier and outsourcing control
5. Construction project monitoring and evaluation

UNIT 3. BUILDING AND URBAN DEVELOPMENT QUALITY AND WATER TREATMENT

1. Quality in urban development and urban construction projects
2. Quality control in residential construction projects
3. Quality control for non-residential social buildings
4. Quality control for non-residential industrial buildings
5. Quality control in the construction of water treatment facilities

UNIT 4. QUALITY CONTROL IN CONSTRUCTION WORKS

1. Dam quality control
2. Roads and airport quality control
3. Railway quality control
4. Quality control in port and offshore construction works
5. Quality control in crossing construction works: Bridges, crossings, etc.
6. Quality control in crossing construction works: Tunnels

MODULE 3. ENVIRONMENTAL MANAGEMENT IN CONSTRUCTION PROJECTS

UNIT 1. INTRODUCTION OF THE ENVIRONMENTAL MANAGEMENT SYSTEM IN CONSTRUCTION PROJECTS

1. Introduction to environmental management
2. Relation with other standards and management systems
3. Environmental management system periods
4. Context analysis

5. EMS scope: Processes and other requirements

UNIT 2. GOVERNANCE AND PLANNING OF AN ENVIRONMENTAL MANAGEMENT SYSTEM IN CONSTRUCTION PROJECTS

1. Leadership, environmental policies and roles
2. Planification: Environmental aspects
3. Planification: Legal and other requirements
4. Planification: Risks (threats and opportunities)
5. Planification of environmental actions and objectives

UNIT 3. SUPPORT AND OPERATION PROCESSES IN ENVIRONMENTAL MANAGEMENT SYSTEM

1. Support: Resource management
2. Support: Management of the documented information
3. Support: Environmental communication management
4. Operation: Environmental management in productive activities
5. Operation: Environmental management plan and its implementation

UNIT 4. PERFORMANCE EVALUATION AND IMPROVEMENT OF ENVIRONMENTAL MANAGEMENT SYSTEM. EXTERNAL CERTIFICATION

1. Performance evaluation: Follow-up, measurement, analysis and measurement activities
2. Performance evaluation: Internal audit
3. Performance evaluation: Management review
4. Improvement activities: Non-conformities and corrective actions
5. External certification

MODULE 4. ENVIRONMENTAL MANAGEMENT AT A CONSTRUCTION SITE

UNIT 1. BASIS OF ENVIRONMENTAL MANAGEMENT AT THE CONSTRUCTION SITE

1. Environmental legal requirements. Permits and licenses
2. The EIA process and its on-site implications
3. On-site industrial plants
4. The ISO 14001 environmental management system and its application in construction
5. On-site environmental monitoring (environmental surveillance)
6. Training and awareness-raising for construction workers

UNIT 2. PREVENTIVE MEASURES FOR ENVIRONMENTAL ON-SITE IMPACTS (I)

1. Noise and dust prevention
2. Protection of vegetation and wildlife
3. Protection of cultural heritage
4. Basis of environmental restoration
5. Energy efficiency on-site

UNIT 3. PREVENTIVE MEASURES FOR ENVIRONMENTAL ON-SITE IMPACTS (II)

1. Actions in watercourses and sensitive environments. Impact prevention

2. On-site water treatment (Sanitary and industrial)
3. Prevention of run-off and erosion during construction works
4. Soil protection. Maintenance of machinery on-site
5. Fuel tanks and other hazardous substances on-site

UNIT 4. WASTE MANAGEMENT

1. On-site waste management
2. Management of HW and other waste
3. Land and on-site recovery of land and waste
4. Environmental emergencies in the execution of works

MODULE 5. SAFETY AND HEALTH CONTROL AT A CONSTRUCTION SITE

UNIT 1. INTRODUCTION TO OCCUPATIONAL RISK PREVENTION: SAFETY AT WORK (I)

1. Introduction
2. Safety conditions in the construction sector
3. Risk evaluation: Methodologies
4. Site implementation. Hygiene and welfare facilities
5. Safety: Risk of falling to the same or different levels

UNIT 2. SAFETY AT WORK (II)

1. Safety: work with chemical agents
2. Safety: Work with electrical risks
3. Safety: Work with explosives
4. Safety: Fire hazard
5. Safety: Machine and plant work

UNIT 3. SAFETY AT WORK III. INDUSTRIAL HYGIENE, ERGONOMICS AND PSYCHOSOCIOLOGY

1. Safety: Work in confined spaces. Work in explosive atmospheres. Work in hyperbaric environments
2. Safety: Work with portable aids and tools
3. Industrial hygiene: Physical and biological risks
4. Ergonomic risks
5. Psychosocial risks

UNIT 4. OCCUPATIONAL RISK PREVENTION MANAGEMENT

1. Accident investigation
2. Occupational health
3. Safety management in design
4. Safety management on-site
5. Safety management in maintenance and operation

MODULE 6. HEALTH AND SAFETY MANAGEMENT

UNIT 1. ISO 45001 - BASIC CONCEPTS

1. Introduction
2. Definition of processes
3. Development of the context analysis
4. Leadership and commitment. OSH policies
5. Roles, responsibilities and authorities in the organization. Consultation and participation of workers

UNIT 2. PLANNING AND COMMUNICATION

1. Planning (I). Actions to address risks and opportunities
2. Planning (II). Actions to address risks and opportunities. OSH objectives and planning to achieve OSH objectives
3. Support (I). Resources. Competencies. Awareness
4. Support (II). Communication
5. Support (III). Documented information

UNIT 3. OPERATIONAL CONTROL

1. Operation. Planning and operational control (I). Elimination of hazards and reduction of risks for OSH
2. Operation. Planning and operational control (II). Change management
3. Operation. Planning and operational control (III). Purchases
4. Operation. Emergency preparedness and response
5. Performance evaluation I. Performance monitoring, measurement, analysis and evaluation

UNIT 4. CONTINUAL IMPROVEMENT

1. Performance evaluation (II). Internal audit
2. Performance evaluation (III). Management review
3. Improvement (I). Incidents, non-conformities and corrective actions
4. Improvement (II). Continual improvement
5. External certification

MODULE 7. INTEGRATED MANAGEMENT OF QUALITY, ENVIRONMENT, AND OCCUPATIONAL HEALTH AND SAFETY. INTEGRATED SYSTEMS. ISO 9001, ISO 14001, ISO 45001

UNIT 1. INTERNATIONAL MANAGEMENT SYSTEMS STANDARDS

1. Introduction to ISO 9001, ISO 14001 and ISO 45001 standards
2. ISO 9001. Quality Management System
3. ISO 14001. Environmental Management System
4. ISO 45001. Occupational Health and Safety Management System

UNIT 2. THE INTEGRATION OF MANAGEMENT SYSTEMS (ISO 66177)

1. Introduction to Integrated Management Systems
2. The Integration of Management Systems
3. Benefits of Integrating Management Systems
4. Process-based Approach and Risk-based Thinking
5. Interested Parties and Their Influence on Integrated Management Systems (IMS)

UNIT 3. THE INTEGRATION PLAN

1. The Analysis of the Organisation's Environment
2. SWOT Analysis
3. The Level and Mode of Integration
4. Requirements for System Integration
5. The Integration Plan
6. The Implementation and Monitoring Process

UNIT 4. SUPPORT: RESOURCES AND COMPETENCIES IN THE IMS

1. Resources Required for the Operation of the IMS
2. Personnel Competence and Training
3. Awareness and integrated organisational culture
4. Documented information: creation, control and maintenance
5. Digital Tools for Document Management in the IMS

MODULE 8. SUSTAINABLE CONSTRUCTION

UNIT 1. INTRODUCTION TO SUSTAINABLE CONSTRUCTION

1. Introduction and historical context
2. Regulations on sustainability in building
3. Sustainability regulations in civil works
4. Building materials and the environment
5. Life cycle analysis

UNIT 2. ENVIRONMENTAL CERTIFICATION OF BUILDINGS

1. Measurement of sustainability in buildings (I)
2. Credits associated with the construction company
3. Measurement of sustainability in buildings (II)
4. BREEAM credits associated with the construction company
5. Valuation of the use of sustainable materials in LEED and BREEAM

UNIT 3. OTHER BUILDING AND CIVIL WORKS CERTIFICATIONS

1. Measurement of sustainability in buildings 3: GREEN
2. GREEN credits associated with the construction company
3. Health and comfort measures in the work environment. WEEL certification
4. Energy efficiency measures in buildings. Passivhaus certification
5. Sustainability measures in civil works

UNIT 4. ENVIRONMENTAL CERTIFICATION INFRAESTRUCTURES. ENVISION

1. Introduction to envision
2. Envision credits associated with quality of life and leadership
3. Envision credits associated with resource allocation
4. Envision credits associated with natural world
5. Envision credits associated with climate and resilience

MODULE 9. CORPORATE SOCIAL RESPONSIBILITY

UNIT 1. CSR: A NEW WAY TO MANAGE ORGANIZATIONS

1. From sustainability to Corporate Social Responsibility
2. The foundation of CSR: Business ethics
3. Institutional reference framework at the international level
4. How is CSR advancing in Spain
5. SDG applied to the business sector

UNIT 2. STAKEHOLDERS AND CSR DIMENSIONS I

1. Stakeholder analysis
2. CSR management areas and benefits for business
3. Transparency and corporate governance
4. CSR and people management
5. Business and human rights

UNIT 3. STAKEHOLDERS AND CSR DIMENSIONS II

1. Supply chain
2. Environment
3. Sustainable finance
4. Collaboration with community
5. Responsible consumption

UNIT 4. MANAGEMENT AND COMMUNICATION TOOLS

1. CSR management tools
2. Main CSR management systems
3. Risk management and CSR
4. CSR communication - The keys to a good strategy
5. CSR communication tools

MODULE 10. MFP. MASTER´S DEGREE IN QUALITY, ENVIRONMENT, SAFETY, AND HEALTH

Did you find this information interesting?

If you still have questions, our academic advising team will be happy to answer them.

Ask us about our training method, our teachers, scholarships or even just get to know us.

Request information without commitment.

Find us here!

info@structuralia.com

www.structuralia.com

Follow us to stay updated!

España

inglaterra



Structuralia
Engineering eLearning



By
EDUCA EDTECH
Group