



# Assure

**CURRICULUM DESIGN AND STANDARD TRAINING  
FOR THE PROFESSIONAL PROFILE OF  
SPECIALIST ON ENVIRONMENTAL SUSTAINABILITY**



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## **Standard Training for the Professional Profile.**

### **Designation of the Professional Profile.**

Specialist on Environmental Sustainability.

### **Related Professions (International Standard Classification of Occupations -ISCO).**

- 2.1.3 Life Science Professionals.
- 2.1.4 Engineers (excluding electrotechnology).
- 2.1.6 Architects, planners, surveyors and designers.

### **ISCED Classification.**

4B.

### **EQF Classification.**

4.

### **Description of the Professional Profile.**

The general competences of the profile are related to the capacity of measurement, evaluation and communication of sustainability issues related to both the territory and the public-private organizations, the implementation of sustainable management and environmental policies for continuous improvement using the best available technologies.

Taking into account the specific characteristics of the professional profile and the many relationships between different sustainability-related issues, the specialists on environmental sustainability must possess technical and social skills to address to all areas and to work in complex teams of different specialists.

The work of the specialist on environmental sustainability is usually developed alongside other professionals in both public and private sectors, and it is oriented to propose solutions based on dialogue with experts on industry and other sectors of economy from a global perspective.

### **Final Certification.**

Professional Specialization Certificate.

### **Typical Work Process.**

The professional profile is characterized by developing the following work processes:

- Classification of activities, processes or products regarding the principles and policies that are applicable for environmental sustainability.
- Implementation of measures for using renewable energy and for energy efficiency, both in public and private organizations.
- Development of measures for sustainable waste management.
- Analysis, evaluation and environmental monitoring.
- Management of Corporate Social Responsibility Policies (CSR) in organizations.
- Planning and sustainable land use.

- Governance of public processes for environmental sustainability.
- Enforcement of measures for sustainable building.

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|---------------------|---|
| <b>Work Process</b> | Classification of activities, processes or products regarding the principles and policies that are applicable for environmental sustainability.                                     |
| <b>Activities</b>   | <ul style="list-style-type: none"> <li>- Identifying updated bibliographic sources.</li> <li>- Accessing to reference documents (legislation and technical regulations).</li> </ul> |
| <b>Competences</b>  | To evaluate the consistency of an item (product, process or action) with the guidelines of reference for environmental sustainability.  |

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| <b>Work Process</b> | Implementation of measures for using renewable energy and for energy efficiency, both in public and private organizations.  |
| <b>Activities</b>   | <ul style="list-style-type: none"> <li>- Technical / economic evaluation of the use of specific solutions for renewable energy production.</li> <li>- Supporting organizations in the planning and implementation of measures for renewable energy production and use according to their specific circumstances.</li> <li>- Promoting activities for the proper use of energy in public and private areas.</li> </ul> |
| <b>Competences</b>  | Identification and exploitation of the production potential and rational use of traditional vs. renewable energy.   |

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| <b>Work Process</b> | Development of measures for sustainable waste management.   |
| <b>Activities</b>   | <ul style="list-style-type: none"> <li>- Coordinating waste management in organizations.</li> <li>- Designing waste management systems for public and private entities.</li> <li>- Developing actions to maximize opportunities for waste recovery, recycling and reuse.</li> </ul> |
| <b>Competences</b>  | Implementation of actions to manage waste according to criteria of environmental effectiveness and efficiency.  |

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| <b>Work Process</b> | Analysis, evaluation and environmental monitoring.   |
| <b>Activities</b>   | <ul style="list-style-type: none"> <li>- Planning and development of environmental analysis.</li> <li>- Environmental assessment of projects, plans and programs.</li> <li>- Implementing monitoring activities of major environmental issues and corrective actions.</li> </ul> |
| <b>Competences</b>  | Establishment and implementation of continuous improvement processes based on audit, evaluation and environmental monitoring.  |

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| <b>Work Process</b> | Management of Corporate Social Responsibility Policies (CSR) in organizations.   |
| <b>Activities</b>   | <ul style="list-style-type: none"> <li>- Analysing environmental requirements of products or services.</li> <li>- Implementing measures to achieve environmental certification of products or processes.</li> <li>- Developing eco-innovative activities for products or processes.</li> <li>- Reporting on financial aspects and behaviour of organizations in</li> </ul> |

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|                    | terms of sustainability.   |
| <b>Competences</b> | <ul style="list-style-type: none"> <li>- Management of different issues of CSR in public or private entities.</li> <li>- Improvement in the scope of sustainability of processes and products within organizations.</li> </ul> |

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| <b>Work Process</b> | Planning and sustainable land use.   |
| <b>Activities</b>   | <ul style="list-style-type: none"> <li>- Implementing actions for sustainable mobility of goods and people.</li> <li>- Adopting measures for sustainable management of natural resources, agriculture and forestry.</li> <li>- Starting-up actions for sustainable tourism.</li> <li>- Planning and carrying out of soil protection measures.</li> </ul> |
| <b>Competences</b>  | Definition and implementation of plans and actions for territory protection by analysing data from large areas.  |

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| <b>Work Process</b> | Governance of public processes for environmental sustainability.   |
| <b>Activities</b>   | <ul style="list-style-type: none"> <li>- Assessing the impact of public policies.</li> <li>- Managing green public procurement processes.</li> <li>- Managing participatory processes of stakeholders on public initiatives for environmental sustainability.</li> <li>- Planning and implementing measures for the promotion and control of private organizations on issues related to environmental sustainability.</li> </ul> |
| <b>Competences</b>  | Application of standards and tools of public status to promote the involvement of private actors in the adoption of environmentally sustainable practices.   |

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| <b>Work Process</b> | Enforcement of measures for sustainable building.   |
| <b>Activities</b>   | <ul style="list-style-type: none"> <li>- Advising on selection of environmentally sustainable solutions for buildings.</li> <li>- Environmental assessment of a project and/or building.</li> <li>- Monitoring the environmental performance of buildings.</li> </ul> |
| <b>Competences</b>  | Application of techniques and tools for energy-environmental quality of buildings.  |

## Competences

|                               |  |
|-------------------------------|--|
| <b>Competence</b>             | To evaluate an item (product, process or action) consistency according to the reference guidelines for environmental sustainability.   |
| <b>Minimum Qualifications</b> | <ul style="list-style-type: none"> <li>- To identify the implications and relations of the item with environmental sustainability.</li> <li>- To have knowledge on identifying the context of reference regarding the general objectives of sustainable development.</li> </ul>  |
| <b>Essential Knowledge</b>    | <ul style="list-style-type: none"> <li>- Concepts and principles of sustainability.</li> <li>- Reference strategies to an international and European level.</li> <li>- Updated framework of actions and programs in the field of environmental sustainability.</li> <li>- Definition of tools to measure environmental sustainability</li> </ul> |

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| <b>Competence</b>             | Identification and exploitation of the production capacity of traditional and renewable energy sources and rational use of these sources.   |
| <b>Minimum Qualifications</b> | <ul style="list-style-type: none"> <li>- Evaluation of the consistency of an entity with reference energy policies.</li> <li>- Development of energy performance synthesis indicators.</li> <li>- Identification of the most suitable technologies for energy production from renewable sources according to its context.</li> <li>- Definition of specific actions in the fields of energy saving and energy efficiency.</li> <li>- Regional energy planning.</li> <li>- Quantification and management of emissions related to energy production and consumption.</li> </ul> |
| <b>Essential Knowledge</b>    | <ul style="list-style-type: none"> <li>- Advantages, barriers and opportunities of key technologies for the production and use of energy from renewable sources.</li> <li>- Policies to stimulate renewable energy production and use.</li> <li>- Options for saving energy in residential and productive uses.</li> <li>- Guidelines and standards (SEAPs) for regional energy planning.</li> <li>- Techniques and tools for calculating emissions from final energy production and consumption.</li> </ul>  |

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| <b>Competence</b>             | Implementation of waste management actions in accordance with the criteria of environmental effectiveness and efficiency.   |
| <b>Minimum Qualifications</b> | <ul style="list-style-type: none"> <li>- Classification of waste according to relevant standards.</li> <li>- Definition of best practices in relation to the barriers and opportunities of the applicable legislation.</li> </ul> |
| <b>Essential Knowledge</b>    | Regulatory and legislative standards in the field of waste management.  |

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| <b>Competence</b>             | Establishment and implementation of continuous improvement processes based on audit, assessment and environmental monitoring.   |
| <b>Minimum Qualifications</b> | <ul style="list-style-type: none"> <li>- Establishment of an audit process.</li> <li>- Use of tools and techniques for the environmental assessment of projects (Environmental Impact Assessment - EIA), plans and</li> </ul> |

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|                            | <p>programs (Strategic Environmental Assessment - SEA).</p> <ul style="list-style-type: none"> <li>- Creation of a monitoring plan.</li> <li>- Implementation of recovery actions based on the results of environmental monitoring.</li> </ul>  |
| <b>Essential Knowledge</b> | <ul style="list-style-type: none"> <li>- Audit Techniques.</li> <li>- Tools and framework for environmental assessment.</li> <li>- Methodologies for environmental data sampling and analysis.</li> <li>- Techniques and technologies for restoring main environmental issues.</li> </ul> |

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| <b>Competence</b>             | Management of the various aspects of Corporate Social Responsibility (CSR) in public or private entities.   |
| <b>Minimum Qualifications</b> | <ul style="list-style-type: none"> <li>- Preparation of a stakeholder map.</li> <li>- Definition of key indicators for entities.</li> <li>- Preparation of documents (financial statements and reports) on the performance of the organizations.</li> </ul> |
| <b>Essential Knowledge</b>    | <ul style="list-style-type: none"> <li>- CSR principles and standards.</li> <li>- Tools for communication and preparation of environmental reports.</li> </ul>  |

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| <b>Competence</b>             | Improvement of the sustainability aspects of processes and products within organizations.   |
| <b>Minimum Qualifications</b> | <ul style="list-style-type: none"> <li>- Characterization of the environmental aspects of products and processes.</li> <li>- Description and adaptation of environmental aspects in order to achieve certain certifications.</li> <li>- Verification and improvement of innovative analysis of products and production process capacities.</li> </ul> |
| <b>Essential Knowledge</b>    | <ul style="list-style-type: none"> <li>- Tools for environmental characterization of products.</li> <li>- Standards for environmental certification of products.</li> <li>- Standards for environmental certification of processes.</li> <li>- Techniques and standards for research and innovation.</li> </ul>                                       |

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| <b>Competence</b>             | Definition and implementation of plans and actions for protecting territories by analysing data from large areas.   |
| <b>Minimum Qualifications</b> | <ul style="list-style-type: none"> <li>- Regional development and interpretation of indicators.</li> <li>- Sustainable planning and integrated environmental issues of local relevance.</li> </ul>  |
| <b>Essential Knowledge</b>    | <ul style="list-style-type: none"> <li>- Standards and guidelines for sustainable territory planning and management.</li> <li>- Technologies for sustainable transport.</li> <li>- Public and private systems and solutions for sustainable mobility.</li> <li>- Practices for the protection of hydrogeological resources.</li> <li>- Analysis of the evolution of land consumption.</li> <li>- Tools and measures for sustainability on tourist activities and destinations.</li> <li>- Tools for preserving biodiversity and natural heritage.</li> <li>- Best practices and standards for the sustainability of agricultural activities.</li> </ul> |

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|  | - Standards for sustainable forest management. |
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| <b>Competence</b>             | Application of public standards and tools to foster the involvement of private actors in the adoption of environmentally sustainable practices.  |
| <b>Minimum Qualifications</b> | <ul style="list-style-type: none"> <li>- Evaluation of public policies.</li> <li>- Implementation of innovative public procurement procedures based purchasing and green public procurement criteria.</li> <li>- Design of participatory procedures targeted to private entities related to public decision-making processes.</li> <li>- Preparation of plans and programs to encourage the adoption of sustainable practices by private entities.</li> </ul>                                    |
| <b>Essential Knowledge</b>    | <ul style="list-style-type: none"> <li>- Techniques and indicators for assessing the sustainability of public policies.</li> <li>- Standards and purchasing criteria for green public procurement.</li> <li>- Techniques and tools for innovative and green public procurement.</li> <li>- Techniques for implementing participatory processes.</li> <li>- Legislation and market instruments to encourage the adoption of environmentally sustainable practices by private entities.</li> </ul> |

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| <b>Competence</b>             | Application of techniques and tools for the energy and environmental quality of buildings.   |
| <b>Minimum Qualifications</b> | <ul style="list-style-type: none"> <li>- Prior evaluation of technical and economic aspects of a solution with regard to the building characteristics.</li> <li>- Preparation of a building evaluation according to the most recognized standards.</li> <li>- Instrumental monitoring of a building's the benchmark yields.</li> </ul>                                   |
| <b>Essential Knowledge</b>    | <ul style="list-style-type: none"> <li>- Strategies and sustainable design elements of buildings.</li> <li>- Sustainable materials and technologies for buildings.</li> <li>- Standards and tools for energy and environmental assessment of buildings.</li> <li>- Techniques and tools for monitoring the energy and environmental performance of buildings.</li> </ul> |

## Vocational Training Course

### Type of Training Course

This training course is under the category of nonformal education, encompassing training standards for professional activities. However, it does not require holding certain qualifications, nor frequency on specific and compulsory training courses.



## Designation

Specialist on Environmental Sustainability.

## Professional Profile of Reference

Specialist on Environmental Sustainability.

## Training Hours

1000

## Previous Requirements

Possession of a Diploma or Certificate of Higher Secondary Education or a Professional Qualification.

## Description of the Vocational Training Course

The recipients of this training course will mainly be young people and unemployed adults with prior work experience.

The itinerary, consistent with the principles of Vocational Education and Training (VET), offers a course designed to provide the theoretical and practical foundations needed to develop the principles of environmental sustainability in actual operational situations.

To be consistent with this itinerary, training activities should primarily lead to the acquisition of the following knowledge and skills:

- Principles and objectives of environmental sustainability.
- Environmental management of organizations and territories, with reference to restrictions and obligations under the European Union law and policies.
- Conditions of renewable energy and its potential use in different contexts, technologies and systems of production and use.
- Incentive systems and tools to support the production of energy from renewable sources as well as its rational and efficient use.
- Features, standards and procedures for the proper handling, storage and treatment of waste.
- Analysis of environmental factors (biotic and abiotic) and their relations with anthropogenic factors.
- Use techniques of monitoring, analysis and evaluation of environmental parameters and subsequent identification of remedial measures.
- Evaluation of the environmental impacts of organizations and definition of the most appropriate indicators for management and accounting in reporting.
- Implementation of tools for the correct management of the environmental aspects in production processes to control and reduce the environmental impact associated with them.
- Use of environmental certification standards and acknowledgement of their potential for improving products and/or services as well as environmental sustainability.
- Implementation of marketing and communication tools consistent with the policies of environmental sustainability.

- Ability to ensure an integrated approach to environmental sustainability, being able to reconcile the interests of the organization of reference, the context in which it operates, consumers and the local community, in line with the principles of Corporate Social Responsibility (CSR ).
- Assessment of the impact on climate change of activities, products or services in order to set targets for improvement and /or establishment of communication actions in the matter.
- Establishment of policies and measures for the development of renewable energy and energy saving.
- Support to the creation of actions to manage land use and hydrogeological balance.
- Advice for sustainable land management and for decision-making processes related to planning and environmental recovering in urban settlements.
- Assessment of energy efficiency in buildings and support in the selection of materials and solutions to improve their energy and environmental performances.
- Basic knowledge to address urban mobility management and planning through measures that optimize public transport, development of pedestrian or cyclist mobility, parking areas and tolls for road use.
- Methodologies for sustainable tourist development.
- Sustainable management of agricultural and forest areas.
- Integration of environmental criteria in procurement and contracting procedures.
- Development of strategies to promote the participation of all stakeholders in the design and implementation of effective policies for environmental sustainability.

## List of Training Modules

| Number | Module  | Hours        | Tools  | Method                         |
|--------|---|--------------|--|--------------------------------|
| 1      | Introduction to Sustainability                    | 28           | Reading materials for learning               | Lecture                        |
| 2      | Energy  | 64           | Reading materials for learning               | Lecture                        |
| 3      | Waste   | 64           | Reading materials for learning               | Lecture                        |
| 4      | Environmental Assessment, Analysis and Monitoring | 68           | Reading materials for learning<br>Activities | Lecture<br>Practice activities |
| 5      | Sustainability of Products and Processes          | 112          | Reading materials for learning               | Lecture                        |
| 6      | Sustainable territory planning and ordering       | 134          | Reading materials for learning               | Lecture                        |
| 7      | Public Initiative Tools for Sustainability        | 36           | Reading materials for learning               | Lecture                        |
| 8      | Sustainable Building                              | 84           | Reading materials for learning<br>Activities | Lecture<br>Practice activities |
|        | <b>FINAL TESTS</b>                                | 10           |  |                                |
|        | <b>PRACTICE</b>                                   | 400          |  |                                |
|        | <b>TOTAL Hours</b>                                | <b>1.000</b> |  |                                |

## Detailed Description of the Training Modules

| Training Module |                                | Work Process   | Activities   | Competences   | Minimum Qualifications   | Essential Knowledge   | Practical Skills   |
|-----------------|--------------------------------|--|--|---|--|---|--|
| 1               | Introduction to Sustainability | Classification of an activity, process or product in relation to the principles and policies that are applicable for environmental sustainability. | <ul style="list-style-type: none"> <li>- Identification of updated bibliographic sources.</li> <li>- Access to reference documents (legislation and technical regulations).</li> </ul> | To assess the consistency of an item (product, process or action) with the environmental sustainability reference guidelines. | <ul style="list-style-type: none"> <li>- Identify the implications and relations of the item with environmental sustainability.</li> <li>- Knowledge for identifying the context of reference from the general objectives of sustainable development.</li> </ul> | Concepts and principles of sustainability.  | <ul style="list-style-type: none"> <li>- Sustainable development concepts.</li> <li>- Principles of education for sustainable development</li> </ul> |
|                 |                                |  |  |   |  | International and European Strategies of Reference.   | Legislative terminology.   |
|                 |                                |  |  |   |  | Updated framework of actions and programs in the field of environmental sustainability.                               | Main European reference standards.   |
|                 |                                |  |  |   |  | Definition of tools to measure environmental sustainability.  | Environmental indicators (features and functions)  |
| 2               | Energy                         | Implementing measures to use renewable energy and to promote sensible management of energy both in public and                                      | <ul style="list-style-type: none"> <li>- Technical / economic evaluation of the use of specific solutions for energy production from renewable sources.</li> </ul>                     | Identification and exploitation of the production potential of traditional and renewable sources of energy and their          | <ul style="list-style-type: none"> <li>- Evaluation of the consistency of an entity with energy policies.</li> <li>- Development of synthesis indicators of energy performance.</li> </ul>   | Benefits, barriers and opportunities of key technologies for the production and use of energy from renewable sources. | Designs and common uses of solar, wind, biomass, geothermal and hydroelectric technologies.  |

| Training Module |       | Work Process   | Activities  | Competences   | Minimum Qualifications  | Essential Knowledge   | Practical Skills   |
|-----------------|-------|--|---|---|---|---|--|
|                 |       | private entities.  | - Support for organizations in the planning and implementation of measures for the production and use of renewable energy according to their circumstances. | rational use.   | - Identification of the most suitable technologies for energy production from renewable sources depending on context.<br>- Definition of specific actions in the fields of energy saving and energy efficiency.<br><br>- Regional energy planning.<br>- Quantification and management of emissions associated with energy production and consumption. | <p>Policies fostering renewable energy.</p> <p>Options for energy saving in residential and productive uses</p> <p>Guidelines and standards (SEAPs) for regional energy planning.</p> <p>Techniques and tools for calculating emissions from final energy production and consumption.</p> | <p>- Incentive rate systems for renewable energy.<br/>- System of Green Certificates.</p> <p>- Criteria for selecting efficient technologies to produce electric and thermal energy.<br/>- Best practices for energy saving.</p> <p>- Covenant of Mayors and guidelines for its implementation.<br/>- Benchmarks in the field of energy and emissions strategy (202020).</p> <p>- How to make and inventory of baseline emissions<br/>- Use and application of emission factors.</p> |
| 3               | Waste | Implementation of actions for sustainable waste management | - Coordination of waste management in organizations.<br>- Design of waste management for the public and private entities.                                   | Implementation of actions to manage waste in accordance with environmental effectiveness and efficiency criteria. | - Classification of waste according relevant standards<br>- Definition of best practices regarding barriers and opportunities for implementing legislation.   | Regulatory and legislative standards in the field of waste management.  | - Use of LoW codes.<br>- Using different forms of log loading, unloading and transport.<br>- Use of electronic systems for tracking waste.   |

| Training Module |   | Work Process   | Activities   | Competences   | Minimum Qualifications  | Essential Knowledge  | Practical Skills  |
|-----------------|---|--|--|---|---|--|---|
|                 |   |  | <ul style="list-style-type: none"> <li>- Implementation of actions to maximize opportunities for waste recovery, recycling and reuse.</li> </ul>   |   |   |  |   |
| 4               | Environmental Assessment, Analysis and Monitoring | Analysis, evaluation and environmental monitoring.                             | <ul style="list-style-type: none"> <li>- Planning and development of environmental analysis.</li> <li>- Environmental assessment of projects, plans and programs.</li> <li>- Development of monitoring activities of major environmental issues and implementing corrective actions.</li> </ul>  | Establishment and implementation of continuous improvement processes based on audit, evaluation and environmental monitoring. | <ul style="list-style-type: none"> <li>- Establishment of an audit process.</li> <li>- Use of techniques and tools for the environmental assessment of projects (Environmental Impact Assessment - EIA), plans and programs (Strategic Environmental Assessment-SEA).</li> <li>- Creation of a monitoring plan.</li> <li>- Implementing recovery actions based on the results of environmental monitoring.</li> </ul> | Audit techniques.  | ISO 19001 Standard.   |
|                 |   |  |  |   |   | Tools and framework for environmental assessment.                    | Application of the procedures established by the European and national legislation for EIA / SEA  |
|                 |   |  |  |   |   | Methods of sampling and analysis of environmental data.              | Sampling Plans:<br>- Sampling systems<br>- Sample testing and analysis.   |
|                 |   |  |  |   |   | Techniques and technologies for recovery major environmental damage. | Treatment systems for biological, chemical and physical remediation of contaminated sites.  |
| 5               | Sustainability of Products and Processes          | Management of CSR (Corporate Social Responsibility) policies in organizations. | <ul style="list-style-type: none"> <li>- Analysis of the environmental requirements of a product or service.</li> <li>- Implementation of measures to achieve the environmental certification of a product or process.</li> <li>- Development of eco-innovative activities for products or processes.</li> <li>- Reporting on financial aspects and behaviour of an organization in terms</li> </ul> | Management of different aspects of CSR in a public or private entity  | <ul style="list-style-type: none"> <li>- Preparation of a stakeholder map.</li> <li>- Definition of key indicators for the entity.</li> <li>- Preparation of documents (financial statements and reports) on the performance of the organization.</li> </ul>  | Principles and standards on CSR.                                     | CSR programs consistent with the standards for the implementation of CSR initiatives (UN Global Compact, SA8000, ISO 26000)                     |
|                 |   |  |  |   |   | Tools for communication and preparation of environmental reports.    | - Financial and environmental sustainability.<br>- Global reporting initiative (sustainability reporting).                                      |
|                 |   |  |  | Improving processes and products sustainability within an organization.   | <ul style="list-style-type: none"> <li>- Characterization of the environmental aspects of products and processes.</li> <li>- Description and adaptation</li> </ul>  | Tools for environmental characterization of products.                | <ul style="list-style-type: none"> <li>- Implementation of LCA / LCC (life cycle cost).</li> <li>- Calculation the carbon footprint.</li> </ul> |

| Training Module |   | Work Process                                    | Activities   | Competences   | Minimum Qualifications   | Essential Knowledge   | Practical Skills  |
|-----------------|---|---|--|---|--|---|---|
|                 |   |   | of sustainability.   |   | of environmental issues in order to achieve certain certifications.<br>- Verification and improvement of the innovative potential of products and processes. | Standards for environmental certification of products.                | - Procedures of obtaining environmental labels type I, II, III<br>- Implementation and testing of the EU Eco-label and international system criteria<br>- EPD (Environmental product declaration) |
|                 |   |   |  |   |  | Standards for environmental certification processes                   | - Environmental Management Systems according to the ISO 14001 standard<br>- Environmental management systems according to EMAS<br>-   |
|                 |   |   |  |   |  | Techniques and standards for research and innovation                  | Implementation of actions in consistence with the EU Action Plan Eco - innovation   |
| 6               | Sustainable Territory Planning and Ordering | Planification and sustainable use of territory. | - Implementation of actions for the sustainable mobility of goods and people<br>- Adoption of measures for sustainable management of natural heritage, agriculture and forestry .<br>- Start up actions for sustainable tourism<br>- Planning and implementation of measures for the protection of soil. | Definition and implementation of plans and actions for the protection of the territory through analysing of data collected from large areas | - Development and interpretation of indicators at regional level<br>- Sustainable planning and integrated environmental issues of local importance<br>-      | Standards and guidelines for sustainable land management and planning | Preparation of plans for environmental improvement in one area  |
|                 |   |   |  |   |  | Sustainable transport technologies                                    | Environmental assessment of a fleet of vehicles   |
|                 |   |   |  |   |  | Systems and solutions for sustainable mobility ( public and private)  | Sustainability evaluation of transport services   |
|                 |   |   |  |   |  | Applications for the protection of hydrogeological resources          | Processing and analysis of indicators related to floods and landslides  |

| Training Module |  | Work Process   | Activities  | Competences  | Minimum Qualifications  | Essential Knowledge  | Practical Skills  |
|-----------------|--|--|---|--|---|--|---|
|                 |  |  |   |  |   | Assessment practices on land consumption   | Evaluation of land use in relation to its basic parameters  |
|                 |  |  |   |  |   | Instruments and measures for sustainability in tourist activities and destinations | - Environmental certification of tourist destinations<br>- Assessment of its load capacity                                      |
|                 |  |  |   |  |   | Tools for the conservation of biodiversity and natural heritage                    | Planning and management of natural areas of interest  |
|                 |  |  |   |  |   | Best practices and standards for sustainable farming.                              | - Integrated production techniques.<br>- Organic farming techniques.  |
|                 |  |  |   |  |   | Standards for sustainable forest management  | - Conformity assessment of forest management.<br>- Conformity assessment in accordance with the chain of custody.               |
| 7               | Public Initiative Tools for Sustainability | Governance of public processes for environmental sustainability. | <ul style="list-style-type: none"> <li>- Assessing the impact of public policies.</li> <li>- Management of green public procurement processes.</li> <li>- Managing stakeholder participatory processes on public initiatives for</li> </ul> | Application of public standards and tools to promote the involvement of private entities in environmentally sustainable practices. | <ul style="list-style-type: none"> <li>- Evaluation of public policies.</li> <li>- Implementation of innovative procurement procedures based on purchasing criteria and green public procurement.</li> <li>- Design of participatory processes targeted to private entities related to public decision-making processes.</li> <li>- Preparation of plans and</li> </ul> | Techniques and indicators for assessing the sustainability of public policies.     | Impact assessment of a plan or action.  |
|                 |  |  |   |  |   | Standards and criteria for Green public procurement                                | Preparation of technical documents according to environmental criteria in the context of procurement and contracting processes. |



| Training Module | Work Process         | Activities   | Competences  | Minimum Qualifications   | Essential Knowledge   | Practical Skills   |   |
|-----------------|----------------------|--|--|--|---|--|---|
|                 |                      |  | environmental sustainability.<br>- Planning and implementation of measures for promotion and control of private organizations on environmental sustainability issues.                                |  | programs to foster the sustainable practices in private entities.   | Techniques and tools for green and innovative public procurement (GPP and IPP).<br><br>Techniques for the implementation of the participatory processes<br><br>Legislation and market instruments to promote environmentally sustainable practices in private entities.                                    | Market analysis in relation to acquisition needs.<br><br>- Forums and debates management.<br>- Using tools to access to environmental information<br><br>Application of market mechanisms and environmental taxes systems.  |
| 8               | Sustainable Building | Implementation of actions for environmental sustainability of buildings. | - Advice on selecting environmentally sustainable solutions for buildings.<br>- Environmental assessment of projects and / or buildings.<br>- Monitoring the environmental performance of buildings. | Application of techniques and tools for energy-environmental quality of buildings. | - Prior evaluation of technical and economic aspects of a solution regarding the building characteristics.<br>- Preparation of the evaluation of a building according to the recognized standards.<br>- Monitoring of basic instrumental performance of a building. | Strategies and sustainable design elements of buildings.<br><br>Materials and technologies for sustainable buildings.<br><br>Standards and tools for energy and environmental assessment of a building.<br><br>Techniques and tools for monitoring the energy and environmental performance of a building. | - Bioclimatic design.<br>- Selecting the shape and location of buildings.<br><br>- Selection of materials.<br>- Passive energy and ventilation systems.<br><br>Use of different evaluation systems (BREEAM, HQE, LEED ...). |



## Assessment

The final assessment includes:

- 1) A technical test using a questionnaire to verify the theoretical knowledge acquired during the training course.
- 2) An individual interview.

## Resources

### Learning Tools and Resources

The materials used during the lectures and the concise electronic presentations prepared by teachers depending on the training course must include, at least, the following elements:

- Excerpts from the regulations related to environmental sustainability.
- Copies of most important technical standards for educational uses (ISO 14001, ISO 26000, AA1000, SA8000 ...).
- Checklists for environmental audits.
- Examples of sustainable energy plans for public departments.
- Examples of documents for proper waste management.
- Examples of environmental monitoring plans.
- Examples of technical reports developed as part of EIA/SEA processes.
- Examples of sustainability reporting by public and private entities.
- Examples of procurement specification documents that meet criteria for green public procurement.
- Examples of sustainable building projects.
- Examples of reports related to energy and environmental assessment of buildings.

### Support Activity Materials

Activities are provided for those training modules that require reinforcement through practice of the theoretical knowledge gained.

The teacher should, therefore, make available:

- A series of checklists for the simulation of environmental audits and for processes and products analysis that come from previously prepared case studies.
- Examples of equipment required for environmental sampling and analysis.
- A set of appropriate tools for the development of an energy audit (wireless sensors for temperature measurement, thermal imaging cameras, heat flux sensors, data logger...).
- A space within the building that can be used to demonstrate how to handle tools.